

Supplementary Methods

The sample. Genotypes from 6709 samples from 10 sites were returned from the Translational

Counts of genotyped DNAs returned from TGEN.										
AGRE	IMGSAC	CPEA	Canada	Stanford	Duke	Vanderbilt	Paris	UNC	Mt. Sinai	Total
2213	1357	937	530	469	344	295	240	236	88	6709

Genomics Research Institute or TGEN. In the received diagnosis file, there was a total of 1496 nominal families (Table 1, manuscript), genotypes from 1491 families were returned by TGEN, and when intersected there were 1317 families with both (useful) genotypes and diagnostic status. Nominal family structures were simple and most consisted of nuclear

Structure and counts of families.

Diagnostic group	No. marriages	No. families	No. nuclear	marriage/family
Narrow	659	522	450 (0.86)	1.26
Broad	904	731	636 (0.87)	1.24
hASD	507	437	393 (0.90)	1.16

families ($\approx 86\%$). The average number of marriages per family was roughly 1.21.

The distribution of affected pairs is given below as counts of pairs of a specific kind per family, although we note that some of the different relative pairs fall in the same family. Suppose for example, in a participating family there was an affected sibling pair and an affected cousin; this family would contribute 1 to the full sibling pairs (FS) and 2 to cousins

Counts of relative pairs per family.							
pairs	FS	PO	HS	NN	CC	125	OTHER
1	1017	1	17	6	36	5	6
2	3	0	4	1	6	1	0
3	85	0	0	0	2	0	0
4	0	0	0	0	2	0	2
5	0	0	0	0	0	0	0
6	2	0	0	0	0	0	0

FS = Full Sibs; PO = Parent/Offspring; HS = Half Sibs; NN = Uncle/Aunt with Nephew/Niece; CC = First Cousins; 125 = pairs with Kinship Coefficient of .125; and OTH = Pairs with Kinship Coefficient < .125.

(CC) count. In addition, if there were four affected siblings in a single nuclear family, there would be 6 pairs and the family would contribute a count of 1 to the FS column in row 6.

Power. Our power estimates integrate results from various sources from the literature (Risch 1990, Krawczak 2001). Roughly, we should have a power of 80% to detect linkage of loci with a stringent LOD score of 3 threshold contributing a locus-specific risk of ≥ 1.29 for a sample size of 1,181 ASPs. (Our sample is slightly larger, in the sense that some families are extended.) For a sample of roughly 700 ASP, locus-specific risk of ≥ 1.54 is required have a power of 80% to detect linkage; and, for a sample of roughly 400 ASP, locus-specific risk of ≥ 1.88 is required.

Discussion of merging CNV information with linkage data. Our approach to merging CNV information with linkage data is necessarily limited by the uncertainty inherent in judging CNV-conferred risk. One would like to partition CNVs into known CNAs, those likely to be CNAs,

those unlikely to be CNAs, and those CNVs that are simply polymorphisms unrelated to ASD. In fact, a statistically-efficient linkage analysis would use a continuous scoring system for CNVs, scoring them 0 if they are certain to be a CNA and 1 if they are certain to be only a polymorphism, with intermediate scores reflecting the degree of ASD risk conferred. It would be natural to place the scoring system in a Bayesian framework, in which the prior (a function of the score and confidence in the CNV call) was established by expert opinion. Because the relationship between CNV and CNA is so unclear at the moment, and the grid of markers too sparse for high confidence in CNV calls, we decided to forego such analyses. Nonetheless our rudimentary approach to linkage analysis with data on CNV yields some intriguing results. Linkage statistics in key genomic regions drop for the filtered and plate methods of CNV-calling, but surprisingly often they increase for the batch method. The most conservative explanation for this observation is that the effect of batch is due to chance, while the effect of filtered and plate is due to diminishing sample size. It is also possible, however, that the increased linkage seen with batch results could be meaningful. If they were, then some of the CNVs dropped in batch, but not the other CNV-calling methods, must be particularly salient for risk to autism.

Supplementary References

Risch, N (1990) Linkage strategies for genetically complex traits. II. The power of affected relative pairs. *Am. J. Hum. Genet.* 46: 229-241.

Krawczak, M (2001) ASP – a simulation-based power calculator for genetic linkage studies of qualitative traits, using sib-pairs. *Hum. Genet.* 109:675-677.

Mapping autism risk loci using genetic linkage and chromosomal rearrangements (The Autism Genome Project (AGP) Consortium)

Supplementary Table 1. List of 624 CNVs in Filtered Analysis.

Supplementary Table 4: List of 624 CNVs in Filtered Analysis (NCBI Build 35)

Sample ID	CNV/sample	Chr	Cytoband	Start	Stop	Size	#SNPs/segment	CNV	Familial	Mendelian error	dGV	RefGene	% overlap
NAAR009-H10-8250-111	1	1	1p36.22 1p36.21	10,931,500	15,413,600	4,482,100	16	gain	yes		yes	TNFRSF8 NM_152942 ICLCN6 NM_021737 IPRAMEF3 NM_001013692 IPRAMEF1	31.5%
NAAR051-F7-HI2612	2	1	1p36.22 1p36.21	10,931,500	15,413,600	4,482,100	16	gain	yes		yes	PRAMEF3 NM_001013692 UMASP2 NM_006610 FLJ43806 NM_201628 TNFRSF1	64.0%
NAAR065-D7-HI2326	2	1	1p36.12	21,400,700	21,625,400	224,700	2	gain			yes	NBPF3 NM_032264 ALPL NM_000478	6.0%
NAAR030-C12-3198.001	2	1	1p35.3	29,119,600	29,842,200	722,600	6	gain			yes	SFRS4 NM_005626 PTPRU NM_005704 MECR NM_001024732 EPB41 NM_203:	0.0%
NAAR047-C10-01C08464	2	1	1p35.2	30,265,700	30,817,000	551,300	8	loss	yes	yes	yes		6.4%
NAAR047-C8-01C08462	1	1	1p35.2	30,265,700	30,817,000	551,300	8	loss	yes		yes		6.4%
NAAR060-G3-HI2323	1	1	1p35.2	30,265,700	30,896,500	630,800	9	loss	yes		yes	MATN1 NM_002379 ILPMT5 NM_006762	5.6%
NAAR030-F11-3196.001	1	1	1p35.2	30,562,400	30,562,600	200	2	loss					0.0%
NAAR036-E11-1014-E11-P2	5	1	1p35.2	30,697,200	30,697,400	200	2	gain					0.0%
NAAR027-A9-3124.001	1	1	1p34.3 1p34.2	38,959,900	40,212,000	1,252,100	4	loss			yes	PPIE NM_006112 ICAP1 NM_006367 RRAGC NM_022157 PPIE NM_203456 IHP	25.4%
NAAR074-A7-04C35667	5	1	1p31.3	60,389,500	61,350,000	960,500	6	gain	yes			NFIA NM_005595	0.0%
NAAR074-C3-04C35691	1	1	1p31.3	60,629,100	61,350,000	720,900	5	gain	yes			NFIA NM_005595	0.0%
NAAR074-D1-04C35701	1	1	1p31.3	60,629,100	61,350,000	720,900	5	gain	yes			NFIA NM_005595	0.0%
NAAR033-A8-3271.005	4	1	1p31.1	72,615,000	73,633,800	1,018,800	6	loss					30.1%
NAAR077-D7-04C38331	5	1	1p31.1	72,615,000	75,810,500	3,195,500	9	gain			yes		13.1%
NAAR001-H4-8021-101	4	1	1p31.1	72,676,100	73,633,800	957,700	5	loss			yes	TNNI3K NM_015978 CRYZ NM_001889 FPGT NM_003838 ILHX8 NM_00100193:	32.0%
NAAR004-C3-8001-101	1	1	1p31.1	75,246,800	77,104,000	1,857,200	11	gain			yes	RABGGTB NM_004582 ACADM NM_000016 SLC44A5 NM_152697 ILHX8 NM_0:	14.3%
NAAR003-D2-8055-204	1	1	1p21.2	101,987,000	101,988,000	11,000	3	loss			yes	OLFM3 NM_058170	0.0%
NAAR024-G11-3072.006	2	1	1p21.1	105,739,000	105,801,000	62,000	3	gain			yes		100.0%
NAAR066-H6-HI2815	1	1	1p21.1	105,739,000	105,801,000	62,000	3	gain			yes		100.0%
NAAR064-F5-HI2040	5	1	1p13.3 1p13.2	111,297,000	111,951,000	654,000	7	gain			yes	ADORA3 NM_020683 ATP5F1 NM_00102014 ADORA3 NM_000677 CHIA NM_:	2.8%
NAAR007-D4-8172-111	1	1	1q21.1	143,780,000	144,894,000	1,114,000	7	gain	yes		yes	GJA5 NM_005266 ICHD1L NM_004284 NBCL9 NM_004326 FMO5 NM_001461 VG	33.6%
NAAR007-D5-8172-201	1	1	1q21.1	143,780,000	144,894,000	1,114,000	7	gain	yes		yes	GJA5 NM_005266 ICHD1L NM_004284 NBCL9 NM_004326 FMO5 NM_001461 VG	33.6%
NAAR007-D6-8172-202	1	1	1q21.1	143,780,000	144,894,000	1,114,000	7	gain	yes		yes	GJA5 NM_005266 ICHD1L NM_004284 NBCL9 NM_004326 FMO5 NM_001461 VG	33.6%
NAAR025-E10-3090.002	1	1	1q21.1	143,780,000	144,479,000	699,000	6	gain			yes	GJA5 NM_005266 ICHD1L NM_004284 NBCL9 NM_004326 FMO5 NM_001461 VG	40.1%
NAAR048-G5-02C09922	1	1	1q21.1	143,780,000	144,894,000	1,114,000	7	gain			yes	GJA5 NM_005266 ICHD1L NM_004284 NBCL9 NM_004326 FMO5 NM_001461 VG	33.6%
NAAR070-D8-HI3079	1	1	1q21.1	143,780,000	144,894,000	1,114,000	7	loss		yes	yes	GJA5 NM_005266 ICHD1L NM_004284 NBCL9 NM_004326 GPR99 NM_016334 VG	33.6%
NAAR006-A3-8125-201	6	1	1q23.3	158,901,000	159,090,000	189,000	6	gain			yes	C1orf111 NM_182581 NOS1AP NM_014697	100.0%
NAAR069-H9-04C29142	3	1	1q23.3	158,901,000	159,599,000	698,000	7	gain			yes	C1orf111 NM_182581 UAP1 NM_003115 NOS1AP NM_014697 DDR2 NM_0010:	47.9%
NAAR073-E2-04C35325	2	1	1q25.2 1q25.3 1q31.1	173,880,000	187,320,000	13,440,000	65	loss			yes	FAM5C NM_199051 NMNAT2 NM_015039 DHX9 NM_001357 GSCN6 NM_0010:	4.6%
NAAR054-H7-HI0392	1	1	1q25.3	178,646,000	179,224,000	578,000	4	loss				TEDDM1 NM_172000 IRGSL1 NM_181572 GLUL NM_002065 IRGSL2 NM_03226	0.0%
NAAR039-G11-1013-B2	2	1	1q25.3	182,320,000	182,320,000	781,000	9	loss			yes	RNF2 NM_007212 VNS1ABP NM_016389 VNS1ABP NM_006469 C1orf24 NM_:	6.7%
NAAR058-E4-HI1581	1	1	1q31.1	185,134,000	185,838,000	704,000	7	loss					0.0%
NAAR073-E2-04C35325	2	1	1q31.2 1q31.3	188,229,000	191,743,000	3,514,000	12	loss		yes	yes	RGS1 NM_002922 IRGS18 NM_130782 UCHL5 NM_015984 IRGS13 NM_144766:	3.7%
NAAR053-A1-HI1319	3	1	1q32.3 1q41	210,055,000	211,720,000	1,665,000	8	gain				SMYD2 NM_020197 KCNK2 NM_001017424 PROX1 NM_002763 KCNK2 NM_01	0.0%
NAAR027-C1-3114.006	1	1	1q42.3	232,746,000	232,746,000	0	2	loss				EROLB NM_019891	0.0%
NAAR044-D7-01C06476	1	1	1q42.3	232,746,000	232,746,000	0	2	loss				EROLB NM_019891	0.0%
NAAR048-G6-02C09923	2	1	1q42.3	232,746,000	232,746,000	0	2	loss				EROLB NM_019891	0.0%
NAAR050-A1-HI2416	1	1	1q42.3	232,746,000	232,746,000	0	2	loss				EROLB NM_019891	0.0%
NAAR008-E1-8205-111	1	1	1q44	240,634,000	245,120,000	4,486,000	12	gain			yes	OR2T3 NM_001004695 OR2L2 NM_001004686 OR2T3 NM_001005495 OR11L:	29.6%
NAAR049-C1-02C10076	1	1	1q44	241,486,000	241,862,000	376,000	4	gain				EFCAB2 NM_032328	0.0%
NAAR029-E6-3166.002	1	1	1q44	244,248,000	245,120,000	872,000	4	gain			yes	OR2T3 NM_001004695 OR2L2 NM_001004686 OR2T3 NM_001005495 OR11L:	79.6%
NAAR043-F6-01C06146	1	2	2p25.3	1,725,230	1,743,780	18,550	3	gain	yes				0.0%
NAAR043-F7-01C06147	1	2	2p25.3	1,725,230	1,743,780	18,550	3	gain	yes				0.0%
NAAR027-D1-3114.007	1	2	2p25.3	3,385,140	3,597,520	212,380	4	gain					0.0%
NAAR053-F7-HI0081	3	2	2p24.3	14,316,000	16,390,700	2,074,700	12	gain			yes	NAG NM_015909 FAM84A NM_145175 MYCN NM_005378 DDX1 NM_004939	11.7%
NAAR056-F7-HI0995	1	2	2p24.3	14,316,000	15,674,900	1,358,900	11	gain			yes	NAG NM_015909 FAM84A NM_145175	17.8%
NAAR057-H7-HI1359	4	2	2p24.3	14,316,000	15,674,900	1,358,900	11	gain			yes	NAG NM_015909 FAM84A NM_145175	17.8%
NAAR072-H7-HI1818	2	2	2p24.3	14,316,000	15,674,900	1,358,900	11	gain			yes	NAG NM_015909 FAM84A NM_145175	17.8%
NAAR023-A10-3047.002	1	2	2p24.2	17,113,300	17,558,400	445,100	6	loss	yes		yes		2.4%
NAAR023-B10-3047.004	1	2	2p24.2	17,113,300	17,558,400	445,100	6	loss	yes	yes	yes		2.4%
NAAR032-E1-3222.002	1	2	2p24.1	21,249,500	21,510,300	260,800	5	gain	yes		yes		0.0%
NAAR032-G1-3222.004	2	2	2p24.1	21,249,500	22,833,700	1,584,200	7	gain	yes		yes		6.8%
NAAR050-E5-02C11285	1	2	2p24.1	23,586,800	23,634,900	48,100	3	loss					0.0%
NAAR067-F3-HI1481	4	2	2p22.3	32,986,100	33,204,100	218,000	3	gain				LTBP1 NM_206943	0.0%
NAAR044-F6-01C06511	1	2	2p22.3	35,794,200	35,911,300	117,100	5	loss			yes		100.0%
NAAR049-C11-02C10134	1	2	2p16.3	50,430,000	50,785,300	355,300	5	loss			yes	NRXN1 NM_004801 NRXN1 NM_138735	17.6%
NAAR049-C8-02C10130	1	2	2p16.3	50,430,000	50,785,300	355,300	5	loss			yes	NRXN1 NM_004801 NRXN1 NM_138735	17.6%
NAAR010-E6-8265-201	1	2	2p16.3	51,891,200	52,313,100	421,900	4	gain					0.0%
NAAR050-B12-02C10068	1	2	2p16.2	54,196,100	54,352,000	155,900	5	loss				ACYF2 NM_138448	0.0%
NAAR050-C1-02C10076	1	2	2p16.2	54,196,100	54,352,000	155,900	5	loss				ACYF2 NM_138448	0.0%
NAAR050-C2-02C10077	1	2	2p16.2	54,196,100	54,352,000	155,900	5	loss				ACYF2 NM_138448	0.0%
NAAR043-H6-01C06231	4	2	2p16.1	58,068,200	59,840,200	1,772,000	6	gain			yes	VRK2 NM_006296 FANCL NM_018062	86.6%
NAAR031-G12-POS	2	2	2p14 2p13.3	66,633,500	68,919,000	2,285,500	10	gain			yes	C1D NM_173177 MEIS1 NM_002398 PPP3R1 NM_000945 LOC554251 NM_0010:	8.7%
NAAR078-C9-F-031-003	1	2	2p12	79,137,300	79,137,300	100	2	loss					0.0%
NAAR076-F3-04C37083	1	2	2p12	83,036,400	83,036,500	100	2	loss					0.0%
NAAR071-G6-04C33169	1	2	2p11.2	83,832,600	84,397,700	565,100	7	gain			yes		7.8%
NAAR002-G8-8044-101	1	2	2p11.2	88,993,300	88,993,400	100	2	loss			yes		100.0%
NAAR003-A5-8047-202	4	2	2p11.2	88,993,300	88,993,400	100	2	loss			yes		100.0%
NAAR003-F10-8064-201	1	2	2p11.2	88,993,300	88,993,400	100	2	loss			yes		100.0%
NAAR052-E11-HI0559	1	2	2q12.1	104,863,000	104,863,000	0	3	loss					0.0%
NAAR052-G3-HI0186	1	2	2q12.3	106,922,000	107,678,000	756,000	7	gain			yes	ST6GAL2 NM_032528	44.6%
NA													

Sample ID	CNV/sample	Chr	Cytoband	Start	Stop	Size	#SNPs/segment	CNV	Familial	Mendelian error	dGV	RefGene	% overlap
NAAR015-H9-R-103-008	1	2	2q22.3	145,475,000	145,587,000	112,000	3	gain					0.0%
NAAR050-D4-02C11231	1	2	2q23.3 2q24.1	152,760,000	158,096,000	5,336,000	29	loss			yes	NR4A2 NM_006186 CACNB4 NM_001005746 KCNCJ3 NM_002239 ARL6IP6 NM_002239 GALNT13 NM_052917	13.2%
NAAR001-A9-8002-202	7	2	2q24.1	154,759,000	155,131,000	372,000	4	loss					0.0%
NAAR071-F2-04C33150	1	2	2q24.1	156,592,000	157,717,000	1,125,000	8	gain				NR4A2 NM_006186 NR4A2 NM_173172 IGPD2 NM_000408 NR4A2 NM_173171	0.0%
NAAR077-H7-05C40979	1	2	2q24.3	165,478,000	166,218,000	740,000	4	gain			yes	SCN2A2 NM_021007 SCN3A NM_006922 COBL1 NM_014900 FLJ39822 NM_1	100.0%
NAAR048-G6-02C09923	2	2	2q31.1	172,258,000	172,303,000	45,000	3	loss					0.0%
NAAR006-A3-8125-201	6	2	2q32.1	184,270,000	186,428,000	2,158,000	11	gain	yes		yes	C2orf10 NM_194250	14.5%
NAAR006-A4-8125-202	1	2	2q32.1	184,623,000	186,428,000	1,805,000	9	gain	yes		yes	C2orf10 NM_194250	9.2%
NAAR057-F1-HI1281	2	2	2q32.1	185,302,000	186,892,000	1,590,000	8	gain			yes	FLJ44048 NM_207482 C2orf10 NM_194250 WFSIP2 NM_173651	0.0%
NAAR072-A12-HI3255	1	2	2q33.3	206,453,000	206,453,000	0	2	loss				NRP2 NM_018534 NRP2 NM_201266 NRP2 NM_003872 NRP2 NM_201279 NR1	0.0%
NAAR072-H7-HI1818	2	2	2q35 2q36.1	216,710,000	222,518,000	5,808,000	19	gain			yes	IGFBP5 NM_000599 TUBA1 NM_006000 CRYBA2 NM_057094 PEPCR NM_01844	5.6%
NAAR075-G4-04C36260	1	3	3p26.3	1,100,380	1,167,990	67,610	3	loss				CNTN6 NM_014461	100.0%
NAAR062-A2-HI0717	1	3	3p26.3	1,478,480	2,264,800	786,320	6	gain			yes	CNTN4 NM_175607	47.3%
NAAR009-F6-8241-111	1	3	3p25.3	8,379,730	8,917,610	537,880	8	loss				C3orf32 NM_015931 LOH3CR2A NM_013343 CAV3 NM_001234 CAV3 NM_0332	0.0%
NAAR009-F8-8241-202	1	3	3p25.3	8,379,730	8,917,610	537,880	8	loss				C3orf32 NM_015931 LOH3CR2A NM_013343 CAV3 NM_001234 CAV3 NM_0332	0.0%
NAAR027-D4-3118.002	3	3	3p25.2 3p25.1	12,870,700	13,806,400	935,700	4	gain			yes	HDAC11 NM_024827 FBLN2 NM_001998 FBLN2 NM_001004019 NUP210 NM_0	39.5%
NAAR058-D6-HI1540	6	3	3p14.2	59,347,700	59,711,600	363,900	7	gain				FHIT NM_002012	0.0%
NAAR007-B2-8159-101	1	3	3p14.1	67,773,300	68,967,900	1,194,600	7	loss	yes		yes	SUCLG2 NM_003848 FAM19A4 NM_001005527 FAM19A1 NM_213609 FAM19A	2.1%
NAAR007-B4-AU32503	1	3	3p14.1	67,773,300	68,967,900	1,194,600	7	loss	yes	yes	yes	SUCLG2 NM_003848 FAM19A4 NM_001005527 FAM19A1 NM_213609 FAM19A	2.1%
NAAR007-B6-8159-203	1	3	3p14.1	67,773,300	68,967,900	1,194,600	7	loss	yes	yes	yes	SUCLG2 NM_003848 FAM19A4 NM_001005527 FAM19A1 NM_213609 FAM19A	2.1%
NAAR077-H11-HI1824	4	3	3p13	70,753,700	71,252,700	499,000	4	gain				FOXP1 NM_032682	0.0%
NAAR030-F9-3192.001	1	3	3p12.2	82,496,200	83,190,200	694,000	6	gain	yes		yes		0.2%
NAAR037-A9-1014-A9-P3	3	3	3p12.2	82,496,200	83,190,200	694,000	6	gain	yes	yes	yes		0.2%
NAAR025-D4-3081.005	1	3	3p12.1	85,618,700	85,619,200	500	3	loss					0.0%
NAAR038-H4-1010-A4-P1	1	3	3p12.1	85,618,700	85,619,200	500	3	loss					0.0%
NAAR076-A7-04C36353	1	3	3p12.1	85,618,700	85,619,200	500	3	loss					0.0%
NAAR078-D11-R-001-017	1	3	3p12.1	85,618,700	85,619,200	500	3	loss					0.0%
NAAR020-F1-HI1314	4	3	3p11.1	88,032,900	88,845,400	812,500	3	gain				HTR1F NM_00866 ICGGBP1 NM_001008390 ICGGBP1 NM_003663 ZNF654 NM	0.0%
NAAR072-G5-HI0615	1	3	3q13.31	117,973,000	118,274,000	301,000	5	loss	yes				0.0%
NAAR025-D4-3081.005	1	3	3q13.31	117,973,000	118,274,000	301,000	5	loss	yes				0.0%
NAAR049-E2-02C10442	1	3	3q24	149,082,000	149,082,000	0	2	loss					0.0%
NAAR054-G9-HI0354	1	3	3q24	149,082,000	149,082,000	0	2	loss					0.0%
NAAR064-F5-HI2040	5	3	3q25.1 3q25.2	152,567,000	154,110,000	1,543,000	8	gain				MBNL1 NM_207294 AADAC NM_001086 MBNL1 NM_021038 MBNL1 NM_20729	39.2%
NAAR007-F6-8177-202	3	3	3q25.3 3q25.32	159,424,000	159,424,000	1,907,000	10	gain			yes	SHOX2 NM_006884 TIPARP NM_015508 FLJ16641 NM_001004316 SSSR3 NM_C	8.6%
NAAR064-F12-HI2093	5	3	3q25.3 3q25.32	157,517,000	158,701,000	1,184,000	7	gain			yes	TIPARP NM_015508 FLJ16641 NM_001004316 SSSR3 NM_001004316 SSSR3 NM_C	10.8%
NAAR045-E11-01C07334	1	3	3q25.33 3q26.1	160,960,000	162,570,000	1,610,000	7	gain			yes	KPNA4 NM_002268 B3GALT3 NM_033168 TRIM59 NM_173084 SMC4L1 NM_00	1.8%
NAAR035-G7-1014-G7-P1	2	3	3q26.1	163,337,000	163,337,000	0	2	gain					0.0%
NAAR017-A10-T-006-001	1	3	3q28 3q29	193,786,000	195,272,000	1,486,000	12	loss			yes	HRASLS NM_020386 IOPA1 NM_130837 IOPA1 NM_130831 IATP13A4 NM_03227	36.4%
NAAR059-C9-HI1878	1	3	3q29	196,940,000	197,775,000	835,000	2	gain				MUC4 NM_018406 MUC20 NM_152673 TFRC NM_003234 TNK2 NM_005781 NR	100.0%
NAAR051-C4-HI2583	1	4	4p16.3	398,952	3,565,630	3,166,678	4	gain			yes	TACC3 NM_006342 LOC345222 NM_001012982 C4orf115 NM_024511 WHSC1 N	21.2%
NAAR052-F6-HI0682	3	4	4p16.3 4p16.2 4p16.1	398,952	17,044,800	16,645,848	64	loss			yes	TACC3 NM_006342 LOC345222 NM_001012982 SH3TC1 NM_018986 PROM1 N	25.0%
NAAR062-H3-HI1083	2	4	4p16.3 4p16.2 4p16.1	398,952	6,790,030	6,391,078	12	gain		yes	yes	TACC3 NM_006342 LOC345222 NM_001012982 STK32B NM_018401 SLC26A1 N	27.6%
NAAR071-B8-HI3174	2	4	4p15.33 4p16.1	10,760,900	11,857,300	1,096,400	7	gain			yes	H3S3T1 NM_005114	1.0%
NAAR052-F6-HI0682	3	4	4p15.32 4p15.31 4p15.1	18,188,800	23,734,300	5,545,500	20	gain		yes	yes	GPR125 NM_145290 KCNC14 NM_025221 MGC29898 NM_145048 GBA3 NM_02	17.3%
NAAR035-C8-1014-C8-P1	1	4	4p15.2	24,846,300	24,846,500	200	2	gain					0.0%
NAAR045-G12-POS	4	4	4p15.2 4p15.1	27,420,500	28,639,200	1,218,700	8	gain	yes		yes	PCDH7 NM_032457 PCDH7 NM_032456 PCDH7 NM_002589	24.9%
NAAR054-G12-POS	1	4	4p15.1	28,022,000	31,238,500	3,216,500	12	gain	yes				25.1%
NAAR065-F7-HI2361	3	4	4p15.1	28,022,000	28,870,800	848,800	7	gain					37.3%
NAAR065-G7-HI1752	8	4	4p15.1	28,022,000	28,639,200	617,200	6	gain					48.4%
NAAR049-B1-02C10026	2	4	4p15.1	28,415,900	28,639,200	223,300	5	gain			yes		46.3%
NAAR041-G3-01C05464	1	4	4p14	36,753,900	36,754,600	700	2	loss					0.0%
NAAR047-C1-01C08451	2	4	4p14	36,753,900	36,754,600	700	2	loss					0.0%
NAAR071-F10-04C33160	1	4	4p14	36,753,900	36,754,600	700	2	loss					0.0%
NAAR074-G9-04C35936	1	4	4p14	36,753,900	36,754,600	700	2	loss					0.0%
NAAR033-C1-3257.002	1	4	4q13.3	71,219,300	71,371,300	152,000	4	loss	yes			APININ NM_017855 C4orf7 NM_152997 CSN3 NM_005212	0.0%
NAAR033-E1-3257.005	1	4	4q13.3	71,219,300	71,371,300	152,000	4	loss	yes	yes		APININ NM_017855 C4orf7 NM_152997 CSN3 NM_005212	0.0%
NAAR001-A9-8002-202	7	4	4q13.3	71,370,900	71,371,300	400	3	loss					0.0%
NAAR072-D11-04C34503	1	4	4q13.3	71,370,900	71,371,300	400	3	gain					0.0%
NAAR066-A3-HI0147	1	4	4q21.22	83,267,800	83,268,300	500	2	loss					0.0%
NAAR010-F6-8268-111	1	4	4q26	116,524,000	118,226,000	1,702,000	9	gain	yes		yes		18.1%
NAAR010-F7-8268-201	1	4	4q26	117,347,000	118,226,000	879,000	7	gain	yes		yes		11.2%
NAAR015-E3-F-022-002	1	4	4q28.1	127,566,000	128,446,000	880,000	8	gain					0.0%
NAAR061-D2-HI0427	2	4	4q32.2	164,134,000	164,820,000	686,000	3	gain			yes	NPY5R NM_006174 NPY1R NM_000909 LOC92345 NM_138386 FLJ11184 NM_1	0.4%
NAAR069-F6-HI2662	2	4	4q32.2 4q32.3	164,134,000	167,151,000	3,017,000	15	gain			yes	KLHL2 NM_007246 NPY5R NM_006174 CPE NM_001873 NPY1R NM_000909 L	5.9%
NAAR044-H2-01C06588	1	4	4q34.1	173,117,000	173,653,000	536,000	6	gain			yes	LOC442117 NM_001034845	0.3%
NAAR014-E11-19992227	1	4	4q34.2 4q34.3	177,732,000	178,003,000	271,000	6	gain				VEGFC NM_005429	0.0%
NAAR047-C1-01C08451	2	4	4q34.3	179,062,000	179,589,000	527,000	5	gain					0.0%
NAAR046-F3-01C08055	2	4	4q34.3 4q35.1 4q35.2	182,216,000	188,232,000	6,016,000	27	gain			yes	DCTD NM_001017232 TLR3 NM_003265 FLJ30277 NM_153008 FLJ12716 NM_1	11.6%
NAAR010-E5-8265-111	1	4	4q34.3	182,703,000	182,703,000	0	3	gain					0.0%
NAAR031-C8-3213.002	1	4	4q34.3	182,703,000	182,703,000	0	3	gain					0.0%
NAAR033-E7-3271.001	3	4	4q34.3	182,703,000	182,703,000	0	3	loss					0.0%
NAAR047-F7-01C08499	1	4	4q35.1 4q35.2	185,809,000	189,310,000	3,501,000	17	gain	yes		yes	TLR3 NM_003265 FLJ11200 NM_018359 DKFZP564J102 NM_001006655 SORB	14.9

Sample ID	CNV/sample	Chr	Cytoband	Start	Stop	Size	#SNPs/segment	CNV	Familial	Mendelian error	dGV	RefGene	% overlap
NAAR007-A6-8156-201	1	4	4q35.2	189,303,000	189,310,000	7,000	3	loss					0.0%
NAAR027-C6-3120.003	1	4	4q35.2	189,303,000	189,310,000	7,000	3	loss	yes				0.0%
NAAR027-D6-3120.004	1	4	4q35.2	189,303,000	189,310,000	7,000	3	loss	yes				0.0%
NAAR027-E6-3120.005	1	4	4q35.2	189,303,000	189,310,000	7,000	3	loss	yes				0.0%
NAAR044-D12-01C06482	1	4	4q35.2	189,303,000	189,310,000	7,000	3	loss					0.0%
NAAR056-B12-HI0790	1	4	4q35.2	189,303,000	189,310,000	7,000	3	loss					0.0%
NAAR068-H2-HI2900	2	4	4q35.2	189,303,000	189,310,000	7,000	3	loss					0.0%
NAAR070-H5-HI3148	1	4	4q35.2	189,303,000	189,310,000	7,000	3	loss	yes				0.0%
NAAR071-A5-HI3159	1	4	4q35.2	189,303,000	189,310,000	7,000	3	loss	yes				0.0%
NAAR071-A7-HI3161	1	4	4q35.2	189,303,000	189,310,000	7,000	3	loss	yes				0.0%
NAAR023-D9-3046.001	1	4	4q35.2	189,670,000	190,118,000	448,000	7	loss	yes		yes		57.5%
NAAR023-F9-3046.003	1	4	4q35.2	189,670,000	190,118,000	448,000	7	loss	yes	yes	yes		57.5%
NAAR062-D4-HI0888	4	4	4q35.2	189,670,000	189,905,000	235,000	5	gain	yes		yes		62.4%
NAAR073-E12-04C35554	1	4	4q35.2	189,670,000	190,118,000	448,000	7	gain	yes		yes		57.5%
NAAR073-F2-04C35556	1	4	4q35.2	189,670,000	190,200,000	530,000	8	gain	yes		yes		57.9%
NAAR073-H10-04C35587	3	4	4q35.2	189,670,000	190,118,000	448,000	7	gain	yes		yes		57.5%
NAAR024-A12-3072.008	1	4	4q35.2	189,808,000	191,091,000	1,283,000	12	loss	yes	yes	yes		72.3%
NAAR024-B12-3072.009	1	4	4q35.2	189,808,000	191,091,000	1,283,000	12	loss	yes	yes	yes		72.3%
NAAR024-G11-3072.006	2	4	4q35.2	189,808,000	191,091,000	1,283,000	12	loss	yes		yes		72.3%
NAAR008-C1-8198-111	1	4	4q35.2	189,897,000	190,666,000	769,000	9	loss			yes		53.8%
NAAR041-G10-01C05471	2	4	4q35.2	190,013,000	191,091,000	1,078,000	8	loss	yes		yes		76.9%
NAAR041-G7-01C05468	2	4	4q35.2	190,013,000	191,091,000	1,078,000	8	loss	yes	yes	yes		76.9%
NAAR046-F3-01C08055	2	4	4q35.2	190,013,000	191,091,000	1,078,000	8	gain			yes		76.9%
NAAR073-C7-04C33155	1	4	4q35.2	190,200,000	191,091,000	891,000	6	gain			yes		75.8%
NAAR003-A5-8047-202	4	5	5p15.33t5p15.32t5p15	1,677,350	8,438,300	6,760,950	43	loss		yes	yes	ADCY2 NM_020546 INSUN2 NM_017755 IRX1 NM_024337 ICE NM_178569 UMTI	13.2%
NAAR045-G12-POS	4	5	5p15.33	1,677,350	4,007,570	2,330,220	15	gain			yes	IRX2 NM_033267 ICE NM_178569 IRX4 NM_016358 MRPL36 NM_032479 IRX1	13.1%
NAAR067-D1-HI2790	4	5	5p15.33	2,372,520	4,007,570	1,635,050	12	gain			yes	IRX2 NM_033267 ICE NM_178569 IRX1 NM_024337	18.6%
NAAR003-A5-8047-202	4	5	5p15.31t5p15.2t5p15	9,538,490	16,046,000	6,507,510	24	loss			yes	LOC134147 NM_138809 CTNND2 NM_001332 LOC134145 NM_199133 FBXL7	18.2%
NAAR030-D12-3198.002	5	5	5p14.1	29,073,500	29,136,100	62,600	4	loss	yes		yes		20.6%
NAAR030-E12-3198.003	1	5	5p14.1	29,073,500	29,136,100	62,600	4	loss	yes	yes	yes		20.6%
NAAR030-F12-3198.004	2	5	5p14.1	29,073,500	29,136,100	62,600	4	loss	yes	yes	yes		20.6%
NAAR031-A1-3198.005	1	5	5p14.1	29,073,500	29,136,100	62,600	4	loss	yes		yes		20.6%
NAAR050-H5-HI2533	2	5	5p14.1	29,073,500	29,136,100	62,600	4	loss	yes	yes	yes		20.6%
NAAR069-C1-HI2941	3	5	5p14.1	29,073,500	29,136,100	62,600	4	loss	yes		yes		20.6%
NAAR041-B8-99C01179	1	5	5p13.3	31,683,400	31,683,500	100	2	loss				PDZK3 NM_015022 PDZK3 NM_178140	0.0%
NAAR075-F3-04C36242	1	5	5p13.3	31,683,400	31,683,500	100	2	loss				PDZK3 NM_015022 PDZK3 NM_178140	0.0%
NAAR030-C3-3179.006	1	5	5p13.3	33,080,000	33,196,500	116,500	4	gain					0.0%
NAAR053-B12-HI0551	2	5	5p13.1	39,193,600	40,355,600	1,162,000	14	gain				C9 NM_001737 FYB NM_199335 DAB2 NM_001343 FYB NM_001465	0.0%
NAAR003-D6-8056-201	1	5	5p13.1	39,448,600	39,469,900	21,300	2	gain				DAB2 NM_001343	0.0%
NAAR050-H6-HI2534	2	5	5p13.1	39,448,600	39,469,900	21,300	2	gain				DAB2 NM_001343	0.0%
NAAR071-D2-04C32109	1	5	5q11.2	52,496,800	55,238,300	2,741,500	17	gain			yes	SKIV2L2 NM_015360 UNG2 NM_001024592 FST NM_006350 DXH29 NM_01902	2.8%
NAAR062-A11-HI0781	1	5	5q12.2t5q12.3t5q13.1	62,596,000	179,796,000	117,200,000	470	gain		yes	yes	SMN2 NM_022876 FABP6 NM_001445 SYNPO NM_007286 VSMN2 NM_022875	11.7%
NAAR031-G8-3214.004	1	5	5q13.3	75,136,400	75,136,700	300	3	loss					0.0%
NAAR046-D1-01C08018	1	5	5q13.3	75,136,400	75,136,700	300	3	loss					0.0%
NAAR071-G1-04C33164	3	5	5q14.3t5q15	90,334,800	93,782,400	3,447,600	11	gain				ARRDC3 NM_020801 WDFZP564D172 NM_032042 MASS1 NM_032119 FLJ256E	0.0%
NAAR071-G1-04C33164	3	5	5q21.1t5q21.2t5q21.3	98,834,000	107,709,000	8,875,000	27	gain		yes	yes	PAM NM_138822 SLCO4C1 NM_180991 HISPPD1 NM_015216 FLJ20125 NM_0	22.5%
NAAR077-H11-HI1824	4	5	5q21.2t5q21.1	102,457,000	103,447,000	990,000	5	gain			yes	HISPPD1 NM_015216 FLJ20125 NM_017676 LOC90355 NM_033211 NUDT12 N	0.0%
NAAR001-A9-8002-202	7	5	5q21.2	103,669,000	104,188,000	519,000	3	loss					13.4%
NAAR047-C10-01C08464	2	5	5q21.3	108,971,000	109,116,000	145,000	4	gain	yes			MAN2A1 NM_002372	0.0%
NAAR047-C11-01C08465	1	5	5q21.3	108,971,000	109,116,000	145,000	4	gain	yes				0.0%
NAAR047-E4-01C08484	1	5	5q23.1	117,078,000	119,691,000	2,613,000	17	loss		yes	yes	DTWD2 NM_173666 HSD17B4 NM_000414 TNFAIP8 NM_014350 LOC340069 N	15.8%
NAAR030-G12-POS	3	5	5q23.1	119,510,000	121,140,000	1,630,000	11	gain				LOC51334 NM_016644	0.0%
NAAR030-G7-3183.003	5	5	5q23.1t5q23.2	119,510,000	121,563,000	2,053,000	13	gain				LOC51334 NM_016644 SRFBP1 NM_152546 FTMT NM_177478 FLJ32921 NM_4	0.0%
NAAR071-C4-HI3182	1	5	5q23.2	125,047,000	125,048,000	1,000	3	loss					0.0%
NAAR029-A9-3171.003	1	5	5q23.2	125,468,000	125,556,000	88,000	5	gain					0.0%
NAAR071-G1-04C33164	3	5	5q23.2t5q23.3	125,873,000	128,314,000	2,441,000	8	gain		yes	yes	SLC12A2 NM_001046 FBN2 NM_001999 FLJ27505 NM_207408 IRNUNX4 NM_03	6.2%
NAAR037-A5-1014-A5-P3	5	5	5q31.1	132,594,000	134,866,000	2,272,000	12	gain				CAMLG NM_001745 PPP2CA NM_002715 SAR1B NM_016103 SKP1A NM_1706	0.0%
NAAR031-B5-3206.001	5	5	5q33.3	158,717,000	158,748,000	31,000	2	gain					0.0%
NAAR064-H4-HI2135	2	5	5q35.2	174,348,000	174,971,000	623,000	7	gain			yes	DRD1 NM_000794 SFXN1 NM_022754 FLJ16171 NM_001004348	15.2%
NAAR027-E4-3118.003	1	6	6p25.3	150,610	150,878	268	3	loss			yes		100.0%
NAAR029-E9-3172.001	1	6	6p25.3	150,610	150,878	268	3	gain			yes	IRF4 NM_002460 HUS1B NM_148959 DUSP22 NM_020185 EXOC2 NM_018303	32.9%
NAAR046-C9-01C08014	1	6	6p25.3	150,610	150,878	268	3	gain			yes		100.0%
NAAR049-G4-HI2402	1	6	6p25.3	150,610	150,878	268	3	gain			yes		100.0%
NAAR070-A1-04C29145	1	6	6p25.3t6p25.2t6p25.1	150,610	37,657,300	37,506,690	158	gain			yes	POU5F1 NM_002701 CCHCR1 NM_019052 MAPK14 NM_139013 PPP1R10 NM_	12.3%
NAAR073-A1-02C09714	1	6	6p25.3	150,610	1,478,110	1,327,500	12	gain	yes		yes	HUS1B NM_148959 DUSP22 NM_020185 IRF4 NM_002460 FOXQ1 NM_033260	19.8%
NAAR073-A3-02C09716	1	6	6p25.3	150,610	1,478,110	1,327,500	12	gain	yes		yes	HUS1B NM_148959 DUSP22 NM_020185 IRF4 NM_002460 FOXQ1 NM_033260	19.8%
NAAR052-F3-HI0633	2	6	6p25.3t6p25.2t6p25.1	374,457	30,443,000	30,068,543	141	loss		yes	yes	HIST1H2BM NM_003521 HIST1H2AJ NM_021066 HIST1H4H NM_003543 IRNF3	7.0%
NAAR055-A4-HI0442	2	6	6p25.2t6p25.1t6p24.3	3,801,430	18,594,500	14,793,070	67	loss		yes	yes	RREB1 NM_001003698 TXNDC5 NM_030810 C6orf114 NM_033069 SLC35B3 N	5.6%
NAAR070-A12-04C29161	1	6	6p24.3	7,456,900	7,595,230	138,330	2	gain			yes	DSP NM_001008844 DSP NM_004415 C6orf151 NM_152551	2.7%
NAAR044-G5-01C06574	1	6	6p22.2	25,282,000	25,382,600	100,600	4	gain					0.0%
NAAR063-C11-HI1397	1	6	6q11.1	62,394,800	62,873,100	478,300	3	gain			yes	KHDRBS2 NM_152688	25.2%
NAAR074-F1-04C35911	1	6	6q11.1t6q11.2	62,394,800	63,485,000	1,090,200	7	gain			yes	KHDRBS2 NM_152688	11.1%
NAAR041-A2-99C00465	4	6	6q14.1	77,520,700	78,789,900	1,269,200	8	gain			yes	HTR1B NM_000863	34.6%
NAAR066-F1-HI2710	2	6	6q14.1	78,060,300	79,324,200	1,263,900	9	gain			yes	HTR1B NM_000863	65.2%
NAAR006-G12-8151-111	1	6	6q14.3	85,815,900	87,307,900	1,492,000	13	gain			yes	SNX14 NM_020468 NT5E NM_002526 SYNCRIP NM_006372 SNX14 NM_15381	0.0%
NAAR045-G6-01C07360	2	6	6q14.3t6q15	87,241,300	87,508,500	267,200	8	gain			yes		1.1%
NAAR077-A10-04C37531	1	6	6q16.1	93,268,700	97,854,000	4,585,300	28	gain			yes	C6orf167 NM_198468 GPR63 NM_030784 MANEA NM_024641 NEPHA7 NM_004	6.2%
NAAR024-E12-3073.004	1	6	6q16.1	94,672,800	95,213,100	540,300	8	loss					0.0%

Sample ID	CNV/sample	Chr	Cytoband	Start	Stop	Size	#SNPs/segment	CNV	Familial	Mendelian error	dGV	RefGene	% overlap		
NAAR001-H4-8021-101	4	6	6q16.3t6q21	104,688,000	105,175,000	487,000	6	loss					0.0%		
NAAR041-A2-99C00465	4	6	6q16.3	104,688,000	105,059,000	371,000	5	gain					0.0%		
NAAR078-A3-200305415	9	6	6q16.3t6q21	104,688,000	112,813,000	8,125,000	29	gain					9.3%		
NAAR078-A3-200305415	9	6	6q21t6q22.1t6q22.2t6q22.3t6q22.4t6q22.5t6q22.6t6q22.7t6q22.8t6q22.9t6q22.10t6q22.11t6q22.12t6q22.13t6q22.14t6q22.15t6q22.16t6q22.17t6q22.18t6q22.19t6q22.20t6q22.21t6q22.22t6q22.23t6q22.24t6q22.25t6q22.26t6q22.27t6q22.28t6q22.29t6q22.30t6q22.31t6q22.32t6q22.33t6q22.34t6q22.35t6q22.36t6q22.37t6q22.38t6q22.39t6q22.40t6q22.41t6q22.42t6q22.43t6q22.44t6q22.45t6q22.46t6q22.47t6q22.48t6q22.49t6q22.50t6q22.51t6q22.52t6q22.53t6q22.54t6q22.55t6q22.56t6q22.57t6q22.58t6q22.59t6q22.60t6q22.61t6q22.62t6q22.63t6q22.64t6q22.65t6q22.66t6q22.67t6q22.68t6q22.69t6q22.70t6q22.71t6q22.72t6q22.73t6q22.74t6q22.75t6q22.76t6q22.77t6q22.78t6q22.79t6q22.80t6q22.81t6q22.82t6q22.83t6q22.84t6q22.85t6q22.86t6q22.87t6q22.88t6q22.89t6q22.90t6q22.91t6q22.92t6q22.93t6q22.94t6q22.95t6q22.96t6q22.97t6q22.98t6q22.99t6q22.100	113,107,000	121,399,000	8,292,000	40	loss	yes	yes	WASF1[NM_003931]tTRAF3IP2[NM_147200]WISP3[NM_003880]tLJ37396[NM_100000]			20.7%	
NAAR045-E5-01C07325	1	6	6q21	113,851,000	114,459,000	608,000	5	gain					0.0%		
NAAR041-E6-00C03336	1	6	6q22.31	120,266,000	120,303,000	37,000	3	loss					0.0%		
NAAR078-A3-200305415	9	6	6q22.31t6q22.32t6q22.33t6q22.34t6q22.35t6q22.36t6q22.37t6q22.38t6q22.39t6q22.40t6q22.41t6q22.42t6q22.43t6q22.44t6q22.45t6q22.46t6q22.47t6q22.48t6q22.49t6q22.50t6q22.51t6q22.52t6q22.53t6q22.54t6q22.55t6q22.56t6q22.57t6q22.58t6q22.59t6q22.60t6q22.61t6q22.62t6q22.63t6q22.64t6q22.65t6q22.66t6q22.67t6q22.68t6q22.69t6q22.70t6q22.71t6q22.72t6q22.73t6q22.74t6q22.75t6q22.76t6q22.77t6q22.78t6q22.79t6q22.80t6q22.81t6q22.82t6q22.83t6q22.84t6q22.85t6q22.86t6q22.87t6q22.88t6q22.89t6q22.90t6q22.91t6q22.92t6q22.93t6q22.94t6q22.95t6q22.96t6q22.97t6q22.98t6q22.99t6q22.100	122,787,000	130,388,000	7,601,000	31	loss	yes	yes	IBRDC1[NM_152553]tPKIB[NM_032471]tC6orf75[NM_021820]tC6orf72t13[NM_001010]tENPP1[NM_006208]tCRSP3[NM_015979]tSTX7[NM_003569]tAKAP7[NM_138633]tCITED2[NM_006079]tHECA1[NM_016217]tREPS1[NM_031922]tXLNB[NM_153235]			6.6%	
NAAR064-A8-HI1697	4	6	6q23.1t6q23.2	131,041,000	132,944,000	1,903,000	14	loss					0.0%		
NAAR078-A3-200305415	9	6	6q24.1	139,167,000	142,639,000	3,472,000	12	loss					0.0%		
NAAR078-A3-200305415	9	6	6q24.2t6q24.3	144,964,000	148,225,000	3,261,000	18	loss					0.0%		
NAAR078-A3-200305415	9	6	6q25.2	153,246,000	153,246,000	959,000	8	loss					8.4%		
NAAR078-A3-200305415	9	6	6q25.3	156,077,000	158,058,000	1,981,000	12	loss					0.0%		
NAAR067-F3-HI1481	4	6	6q25.3	157,739,000	157,941,000	202,000	3	gain					0.0%		
NAAR064-A8-HI1697	4	6	6q25.3t6q26	160,834,000	161,858,000	1,024,000	10	loss					36.2%		
NAAR001-H10-8023-111	1	6	6q26	161,853,000	162,532,000	779,000	4	gain	yes				30.6%		
NAAR052-G9-HI1097	1	6	6q26	163,090,000	163,493,000	403,000	4	gain	yes				28.2%		
NAAR017-C4-HI2209	3	6	6q26	163,493,000	163,493,000	0	3	gain	yes				0.0%		
NAAR061-E8-HI0532	1	6	6q26	163,493,000	163,493,000	0	3	loss					0.0%		
NAAR064-A8-HI1697	4	6	6q26t6q27	164,166,000	165,792,000	1,626,000	13	loss					0.0%		
NAAR010-G1-8268-202	2	6	6q27	165,016,000	165,037,000	21,000	3	loss					0.0%		
NAAR078-A3-200305415	9	6	6q27	165,016,000	167,022,000	2,006,000	13	loss					7.8%		
NAAR025-A7-3085.007	1	7	7p22.2	2,969,570	2,969,680	110	2	loss					0.0%		
NAAR068-F3-HI2864	2	7	7p21.3	11,009,900	11,131,300	121,400	4	loss					40.6%		
NAAR047-H1-02C09502	8	7	7p21.3t7p21.2t7p21.1	11,993,100	17,334,000	5,340,900	20	gain					45.7%		
NAAR047-E1-01C08481	3	7	7p21.3t7p21.2t7p21.1	12,246,800	15,746,800	3,500,000	15	gain					46.2%		
NAAR064-H2-HI2133	1	7	7p21.3	12,577,400	12,826,100	248,700	5	gain					0.0%		
NAAR063-F2-HI1522	1	7	7p12.3t7p12.2	49,519,500	50,739,200	1,219,700	8	gain	yes				0.0%		
NAAR063-F4-HI1524	2	7	7p12.3t7p12.2	49,519,500	50,046,900	527,400	6	gain	yes				0.0%		
NAAR064-A2-HI1684	1	7	7q21.11	83,174,700	84,701,800	1,527,100	11	loss	yes				0.0%		
NAAR064-A4-HI1686	1	7	7q21.11	83,174,700	85,227,400	2,052,700	14	loss	yes	yes			8.0%		
NAAR054-A7-HI0123	1	7	7q21.13	87,837,300	89,132,500	1,295,200	6	gain	yes				15.7%		
NAAR059-G5-HI2100	1	7	7q21.13	87,837,300	89,132,500	1,295,200	6	gain	yes				15.7%		
NAAR045-E8-01C07331	3	7	7q31.32t7q31.31	120,217,000	121,543,000	1,326,000	5	loss					8.7%		
NAAR048-E1-02C09751	1	7	7q31.31	120,217,000	120,217,000	0	2	loss					0.0%		
NAAR061-A6-HI0130	1	7	7q31.32	120,844,000	121,741,000	897,000	4	loss	yes				0.0%		
NAAR061-A5-HI0128	1	7	7q31.32	121,543,000	122,291,000	748,000	4	loss	yes	yes			0.0%		
NAAR045-E8-01C07331	3	7	7q33	132,410,000	135,011,000	2,601,000	17	loss					13.3%		
NAAR033-A9-3273.002	2	7	7q33	133,804,000	135,011,000	1,207,000	7	gain	yes				12.5%		
NAAR055-C8-HI0552	1	7	7q33	133,804,000	135,011,000	1,207,000	7	gain	yes				12.5%		
NAAR068-D9-HI2841	4	7	7q33	133,804,000	135,011,000	1,207,000	7	gain	yes				12.5%		
NAAR045-E8-01C07331	3	7	7q35t7q36.1t7q36.2t7q36.3t7q36.4t7q36.5t7q36.6t7q36.7t7q36.8t7q36.9t7q36.10t7q36.11t7q36.12t7q36.13t7q36.14t7q36.15t7q36.16t7q36.17t7q36.18t7q36.19t7q36.20t7q36.21t7q36.22t7q36.23t7q36.24t7q36.25t7q36.26t7q36.27t7q36.28t7q36.29t7q36.30t7q36.31t7q36.32t7q36.33t7q36.34t7q36.35t7q36.36t7q36.37t7q36.38t7q36.39t7q36.40t7q36.41t7q36.42t7q36.43t7q36.44t7q36.45t7q36.46t7q36.47t7q36.48t7q36.49t7q36.50t7q36.51t7q36.52t7q36.53t7q36.54t7q36.55t7q36.56t7q36.57t7q36.58t7q36.59t7q36.60t7q36.61t7q36.62t7q36.63t7q36.64t7q36.65t7q36.66t7q36.67t7q36.68t7q36.69t7q36.70t7q36.71t7q36.72t7q36.73t7q36.74t7q36.75t7q36.76t7q36.77t7q36.78t7q36.79t7q36.80t7q36.81t7q36.82t7q36.83t7q36.84t7q36.85t7q36.86t7q36.87t7q36.88t7q36.89t7q36.90t7q36.91t7q36.92t7q36.93t7q36.94t7q36.95t7q36.96t7q36.97t7q36.98t7q36.99t7q36.100	144,828,000	155,187,000	10,359,000	29	loss							17.0%
NAAR073-E10-04C35552	1	7	7q35t7q36.1t7q36.2t7q36.3t7q36.4t7q36.5t7q36.6t7q36.7t7q36.8t7q36.9t7q36.10t7q36.11t7q36.12t7q36.13t7q36.14t7q36.15t7q36.16t7q36.17t7q36.18t7q36.19t7q36.20t7q36.21t7q36.22t7q36.23t7q36.24t7q36.25t7q36.26t7q36.27t7q36.28t7q36.29t7q36.30t7q36.31t7q36.32t7q36.33t7q36.34t7q36.35t7q36.36t7q36.37t7q36.38t7q36.39t7q36.40t7q36.41t7q36.42t7q36.43t7q36.44t7q36.45t7q36.46t7q36.47t7q36.48t7q36.49t7q36.50t7q36.51t7q36.52t7q36.53t7q36.54t7q36.55t7q36.56t7q36.57t7q36.58t7q36.59t7q36.60t7q36.61t7q36.62t7q36.63t7q36.64t7q36.65t7q36.66t7q36.67t7q36.68t7q36.69t7q36.70t7q36.71t7q36.72t7q36.73t7q36.74t7q36.75t7q36.76t7q36.77t7q36.78t7q36.79t7q36.80t7q36.81t7q36.82t7q36.83t7q36.84t7q36.85t7q36.86t7q36.87t7q36.88t7q36.89t7q36.90t7q36.91t7q36.92t7q36.93t7q36.94t7q36.95t7q36.96t7q36.97t7q36.98t7q36.99t7q36.100	146,118,000	155,187,000	9,069,000	32	loss							19.4%
NAAR076-C9-04C36598	1	7	7q36.1	149,120,000	149,120,000	0	2	gain					0.0%		
NAAR052-E3-HI0085	1	7	7q36.1	149,576,000	149,709,000	133,000	4	loss	yes				24.5%		
NAAR077-A7-04C37528	3	7	7q36.3	155,187,000	158,055,000	2,868,000	5	gain					24.0%		
NAAR062-H3-HI1083	2	8	8p23.3t8p23.2t8p23.1	1,130,900	6,780,950	5,650,050	32	loss					59.0%		
NAAR062-D4-HI0888	4	8	8p23.2	2,761,850	3,910,100	1,148,250	8	gain					28.4%		
NAAR064-A9-HI1698	1	8	8p23.2	2,761,850	3,910,100	1,148,250	8	gain					28.4%		
NAAR063-C5-HI1372	1	8	8p23.2	3,909,530	3,910,100	570	3	gain	yes				100.0%		
NAAR064-E5-HI1947	1	8	8p23.2	3,909,530	4,949,310	1,039,780	12	gain	yes				100.0%		
NAAR067-A8-HI2741	2	8	8p23.2	3,909,530	3,909,710	180	2	gain	yes				100.0%		
NAAR006-F6-8145-201	1	8	8p23.2	4,473,850	5,900,610	1,426,760	13	gain	yes				100.0%		
NAAR054-C1-HI0191	1	8	8p23.2	4,473,850	4,949,310	475,460	9	gain	yes				100.0%		
NAAR054-B12-HI0189	1	8	8p23.2	4,881,960	4,949,310	67,350	4	gain	yes				100.0%		
NAAR007-E6-8175-201	1	8	8p23.1	8,160,870	11,422,100	3,261,230	11	loss	yes				9.6%		
NAAR041-F5-00C03537	1	8	8p22	13,570,600	14,168,200	597,600	7	gain	yes				52.8%		
NAAR041-G2-00C04611	1	8	8p22	13,570,600	14,168,200	597,600	7	gain	yes				52.8%		
NAAR050-H10-HI2538	2	8	8q11.21	50,311,400	50,549,200	237,800	2	gain					0.0%		
NAAR041-A2-99C00465	4	8	8q11.23	54,253,900	54,663,300	409,400	5	gain					8.4%		
NAAR075-D1-04C36207	1	8	8q13.2	69,712,800	70,314,600	601,800	5	gain					0.0%		
NAAR032-C11-3252.003	1	8	8q13.3	70,795,900	72,139,600	1,343,700	9	gain					0.0%		
NAAR007-H1-8181-111	3	8	8q21.3t8q22.1	93,267,400	95,306,200	2,038,800	7	gain							

Sample ID	CNV/sample	Chr	Cytoband	Start	Stop	Size	#SNPs/segment	CNV	Familial	Mendelian error	dGV	RefGene	% overlap
NAAR064-F6-HI2067	3	9	9p24.3 9p24.2 9p24.1	239,391	33,916,500	33,677,109	213	gain	yes		yes	KIAA1815 NM_024896 UHRF2 NM_152306 FREM1 NM_144966 IRFX3 NM_0029	16.3%
NAAR064-F8-HI2081	2	9	9p24.3	239,391	1,599,250	1,359,859	8	gain	yes		yes	ANKRD15 NM_153186 DMRT2 NM_181872 DMRT2 NM_006557 ANKRD15 NM_	68.9%
NAAR065-B12-HI2269	3	9	9p24.3	239,391	1,599,250	1,359,859	8	gain			yes	ANKRD15 NM_153186 DMRT2 NM_181872 DMRT2 NM_006557 ANKRD15 NM_	68.9%
NAAR069-C1-HI2941	3	9	9p24.3	239,391	559,992	320,601	5	gain	yes		yes	ANKRD15 NM_015158 DOCK8 NM_203447	56.1%
NAAR071-F7-04C33157	1	9	9q34.12 9p24.3 9p24.1	239,391	135,055,000	134,815,609	483	gain			yes	SLC27A4 NM_005094 C5 NM_001735 GAS1 NM_002048 GBA2 NM_020944 PS	17.6%
NAAR072-E4-04C34510	4	9	9p24.2 9p24.1 9p22.3	3,111,990	32,033,400	28,921,410	179	gain			yes	KIAA1815 NM_024896 UHRF2 NM_152306 FREM1 NM_144966 IRFX3 NM_0029	15.0%
NAAR071-E6-HI2334	8	9	9p24.1 9p23	5,719,380	12,277,900	6,558,520	53	gain			yes	KIAA1815 NM_024896 UHRF2 NM_152306 UJMJD2C NM_015061 MLANA NM_00	22.3%
NAAR041-F10-00C04574	2	9	9p23	11,611,200	12,277,900	666,700	10	loss	yes		yes		78.3%
NAAR041-F12-00C04583	1	9	9p23	11,611,200	12,277,900	666,700	10	loss	yes		yes		78.3%
NAAR065-B12-HI2269	3	9	9p23 9p22.3	11,611,200	14,481,300	2,870,100	31	gain			yes	NFIB NM_005596 TYRP1 NM_000550 C9orf150 NM_203403 MPDZ NM_003829	35.5%
NAAR002-G12-8045-101	1	9	9p23	12,010,900	12,277,900	267,000	6	loss	yes		yes		86.0%
NAAR024-B1-3053.001	1	9	9p23	12,010,900	12,018,400	7,500	3	gain			yes		100.0%
NAAR052-H6-HI1012	1	9	9p23	12,010,900	12,277,900	267,000	6	loss		yes	yes		86.0%
NAAR059-C10-HI1879	1	9	9p23	12,010,900	12,445,200	434,300	7	loss			yes		91.4%
NAAR071-H9-HI1766	1	9	9p23	12,010,900	12,277,900	267,000	6	loss	yes		yes		86.0%
NAAR045-G12-POS	4	9	9p22.3 9p23	13,460,700	14,100,200	639,500	9	gain				NFIB NM_005596	0.0%
NAAR065-G8-HI1753	3	9	9p23 9p22.3	13,460,700	15,131,200	1,670,500	18	gain				FREM1 NM_144966 NFIB NM_005596 CER1 NM_005454 ZDHHC21 NM_17856E	0.0%
NAAR017-E6-HI2334	8	9	9p21.3 9p21.2 9p21.1	21,971,600	33,646,900	11,675,300	60	loss			yes	C9orf72 NM_018325 C9orf72 NM_145005 C9orf82 NM_024828 ELAVL2 NM_004-	13.8%
NAAR065-B12-HI2269	3	9	9p21.1	23,996,000	23,996,000	300	3	loss					0.0%
NAAR065-B12-HI2269	3	9	9p21.1	28,114,200	31,349,900	3,235,700	11	gain			yes	LRRN6C NM_152570	37.9%
NAAR017-E6-HI2334	8	9	9p13.3 9p13.2 9p13.1	34,733,600	80,821,100	46,087,500	68	gain			yes	ZA20D2 NM_006007 LOC401507 NM_001012278_copy_2 GBA2 NM_020944 PS	27.4%
NAAR072-E4-04C34510	4	9	9p13.3 9p13.2 9p13.1	35,893,400	69,076,300	33,182,900	14	gain		yes	yes	RP11-561O23.3 NM_199135 PRKACG NM_002732 OR2S2 NM_019897 HGFBPL	36.0%
NAAR037-A9-1014-A9-P3	3	9	9p13.2	38,017,600	38,288,600	271,000	4	gain				SHB NM_003028	0.0%
NAAR039-C8-1021-C8-P3	2	9	9p13.2	38,017,600	38,288,600	271,000	4	gain				SHB NM_003028	0.0%
NAAR069-H9-04C29142	3	9	9p13.2	38,017,600	38,288,600	271,000	4	gain				SHB NM_003028	0.0%
NAAR053-G6-HI0099	1	9	9q13 9q12	67,050,700	67,719,200	668,500	2	gain			yes		100.0%
NAAR056-F2-HI0963	1	9	9q13 9q12	67,050,700	67,719,200	668,500	2	gain			yes		100.0%
NAAR064-F6-HI2067	3	9	9q21.1 9q21.12 9q21	70,403,200	90,734,300	20,331,100	84	gain			yes	GAS1 NM_002048 PSTAT1 NM_058179 CTSL NM_145918 ALDH1A1 NM_000689	14.0%
NAAR022-A8-3019.004	1	9	9q21.12 9q21.11	70,619,600	70,908,800	289,200	7	loss	yes		yes	TRPM3 NM_206946 TRPM3 NM_206944 TRPM3 NM_020952 TRPM3 NM_20694	0.0%
NAAR022-H7-3019.003	1	9	9q21.12 9q21.11	70,619,600	70,908,800	289,200	7	loss	yes		yes	TRPM3 NM_206946 TRPM3 NM_206944 TRPM3 NM_020952 TRPM3 NM_20694	0.0%
NAAR045-E6-01C07328	1	9	9q34.12 9q21.13 9q21	72,754,300	135,055,000	62,300,700	239	gain			yes	SLC27A4 NM_005094 CTNNAL1 NM_003798 C5 NM_001735 CDKN9 NM_01261	11.0%
NAAR072-E4-04C34510	4	9	9q21.13 9q21.2 9q21.1	75,335,100	114,582,000	39,246,900	156	gain			yes	GAS1 NM_002048 PSTAT1 NM_058179 CDC26 NM_139286 OGN NM_014057 C	10.0%
NAAR017-E6-HI2334	8	9	9q21.32 9q21.33	83,165,400	84,477,000	1,311,600	6	gain			yes	SLC28A3 NM_022127 HNRPK NM_002140 HNRPK NM_031263 FRMD3 NM_17-	14.5%
NAAR017-E6-HI2334	8	9	9q22.32 9q22.33 9q31	94,369,100	100,208,000	5,838,900	19	gain			yes	COL15A1 NM_001855 INR4A3 NM_006981 C9orf21 NM_153698 CTSL2 NM_001-	0.0%
NAAR064-F6-HI2067	3	9	9q34.12 9q31.2 9q32	101,512,000	135,055,000	33,543,000	138	gain			yes	SLC27A4 NM_005094 C5 NM_001735 OR1N2 NM_001004457 CDC26 NM_1392	10.2%
NAAR017-E6-HI2334	8	9	9q31.1 9q31.2 9q31.3	103,447,000	110,085,000	6,638,000	38	gain			yes	CTNNAL1 NM_003798 OR13D1 NM_001004484 PTPN3 NM_002829 FCMD NM_	7.1%
NAAR046-H2-01C08084	4	9	9q31.3	111,481,000	111,802,000	321,000	6	gain				LOC552891 NM_004125 bA16L2.1.2 NM_001015882 UGCG NM_003358 C9orf	0.0%
NAAR058-B12-HI1450	1	9	9q31.3	111,481,000	111,802,000	321,000	6	gain				bA16L2.1.2 NM_001015882 LOC552891 NM_004125 UGCG NM_003358 C9orf	0.0%
NAAR065-G8-HI1753	3	9	9q31.3	111,481,000	111,802,000	321,000	6	gain				bA16L2.1.2 NM_001015882 LOC552891 NM_004125 UGCG NM_003358 C9orf	0.0%
NAAR017-E6-HI2334	8	9	9q31.3 9q32 9q33.1	111,924,000	116,332,000	4,408,000	27	gain			yes	CDC26 NM_139286 HSDL2 NM_032303 ASTN2 NM_198187 WDR31 NM_00100-	17.3%
NAAR025-H6-3085.006	1	9	9q33.1	116,515,000	116,620,000	105,000	5	loss			yes	ASTN2 NM_198187 ASTN2 NM_014010 ASTN2 NM_198188 ASTN2 NM_198186	15.0%
NAAR065-G8-HI1753	3	9	9q33.1	116,515,000	117,518,000	1,003,000	9	loss			yes	ASTN2 NM_014010 ASTN2 NM_198188 ASTN2 NM_198186 TRIM32 NM_012211	1.6%
NAAR017-E6-HI2334	8	9	9q33.1 9q33.2 9q33.3	117,687,000	132,816,000	15,129,000	44	gain			yes	SLC27A4 NM_005094 C5 NM_001735 CDKN9 NM_001261 VRAPGEF1 NM_005312	11.0%
NAAR072-E4-04C34510	4	9	9q33.1 9q33.2 9q33.3	119,279,000	135,055,000	15,776,000	34	gain			yes	SLC27A4 NM_005094 C5 NM_001735 OR1N2 NM_001004457 ORC31 NM_0010	11.9%
NAAR065-E12-HI0179	1	10	10p13	13,087,500	13,302,400	214,900	4	loss	yes		yes	OPTN NM_001008212 OPTN NM_021980 MCM10 NM_018518 OPTN NM_0010C	7.1%
NAAR065-F2-HI0182	1	10	10p13	13,087,500	13,302,400	214,900	4	loss	yes		yes	OPTN NM_001008212 OPTN NM_021980 MCM10 NM_018518 OPTN NM_0010C	7.1%
NAAR061-C8-HI0403	1	10	10p12.31	20,867,100	20,867,300	200	2	loss					100.0%
NAAR048-F6-02C09889	1	10	10q11.21	43,521,000	43,578,500	57,500	5	loss					0.0%
NAAR060-A6-HI2164	1	10	10q11.22 10q11.23	49,217,200	51,475,300	2,258,100	15	gain	yes		yes	ARHGAP22 NM_021226 TIMM23 NM_006327 CHAT NM_020985 IPARG NM_003	36.9%
NAAR060-A7-HI2165	1	10	10q11.22 10q11.23	49,217,200	50,638,800	1,421,600	14	gain	yes		yes	ARHGAP22 NM_021226 CHAT NM_020985 NM_173524 CHAT NM_020986 C10	0.0%
NAAR060-A8-HI2166	1	10	10q11.22 10q11.23	49,217,200	50,638,800	1,421,600	14	gain	yes		yes	ARHGAP22 NM_021226 CHAT NM_020985 NM_173524 CHAT NM_020986 C10	0.0%
NAAR009-G7-8246-111	1	10	10q21.1	59,937,900	59,938,400	500	3	loss					0.0%
NAAR015-G8-R-020-001	1	10	10q21.1	59,937,900	59,938,400	500	3	loss					0.0%
NAAR025-F7-3085.012	1	10	10q21.1	59,937,900	59,938,400	500	3	loss					0.0%
NAAR029-H6-3167.001	1	10	10q21.1	59,937,900	59,938,400	500	3	loss					0.0%
NAAR043-H10-01C06237	1	10	10q21.1	59,937,900	59,938,400	500	3	loss	yes				0.0%
NAAR057-C7-HI1208	1	10	10q21.3	64,337,400	66,284,700	1,927,300	9	gain			yes	JMJD1C NM_004241 C10orf74 NM_001001330 NRBF2 NM_030759	0.1%
NAAR044-H5-01C06591	1	10	10q22.1 10q22.2 10q2	67,889,900	133,793,000	65,903,100	258	gain			yes	COL13A1 NM_080806 PNLIPRP3 NM_00101709 CH25H NM_003956 HTR7 NM	12.0%
NAAR030-F10-3194.001	1	10	10q21.3	68,424,900	68,552,100	127,200	6	gain	yes			CTNNA3 NM_013266 LRRTM3 NM_178011	0.0%
NAAR030-G10-3194.003	1	10	10q21.3	68,424,900	68,552,100	127,200	6	gain	yes			CTNNA3 NM_013266 LRRTM3 NM_178011	0.0%
NAAR049-B5-02C10059	1	10	10q22.2	76,995,300	77,016,100	20,800	2	gain					0.0%
NAAR017-C1-HI2201	3	10	10q23.31 10q23.32	91,385,400	93,008,000	1,622,600	10	gain				HTR7 NM_019859 MPHOSPH1 NM_016195 PANK1 NM_138316 HTR7 NM_000E	2.0%
NAAR047-E1-01C08481	3	10	10q23.31 10q23.32	92,008,800	93,008,000	999,200	7	gain			yes	HTR7 NM_019859 HTR7 NM_000872 VRPP30 NM_006413 ANKRD1 NM_014391	3.2%
NAAR047-H1-02C09502	8	10	10q23.31 10q23.32	92,008,800	93,008,000	999,200	7	gain			yes	HTR7 NM_019859 HTR7 NM_000872 VRPP30 NM_006413 ANKRD1 NM_014391	3.2%
NAAR057-F1-HI1281	2	10	10q23.31 10q23.32	92,008,800	93,008,000	999,200	7	gain			yes	HTR7 NM_000872 VRPP30 NM_006413 HTR7 NM_019860 HTR7 NM_019859 AN	3.2%
NAAR058-H6-HI1660	3	10	10q23.31 10q23.32	92,008,800	93,008,000	999,200	7	gain			yes	HTR7 NM_000872 VRPP30 NM_006413 HTR7 NM_019860 HTR7 NM_019859 AN	3.2%
NAAR077-A7-0													

Sample ID	CNV/sample	Chr	Cytoband	Start	Stop	Size	#SNPs/segment	CNV	Familial	Mendelian error	dGV	RefGene	% overlap
NAAR001-C2-8006-202	1	11	11p15.1	18,048,100	18,048,400	300	2	loss					0.0%
NAAR003-E10-8061-111	1	11	11p14.3	21,642,900	22,349,700	706,800	6	gain			yes	TMEM16E NM_213599 SLC17A6 NM_020346	14.7%
NAAR049-C2-02C10077	1	11	11p14.3	21,642,900	22,023,800	380,900	5	gain			yes		27.3%
NAAR069-D1-HI2967	1	11	11p14.3	21,642,900	21,709,300	66,400	4	gain			yes		58.5%
NAAR041-E7-00C03337	1	11	11p14.3	21,709,100	21,709,300	200	3	gain					0.0%
NAAR076-G4-04C37169	1	11	11p14.3	21,709,100	21,709,300	200	3	gain	yes				0.0%
NAAR076-G5-04C37170	1	11	11p14.3	21,709,100	21,709,300	200	3	gain	yes				0.0%
NAAR001-A9-8002-202	7	11	11p14.3	22,349,700	22,375,100	25,400	4	loss					0.0%
NAAR057-H7-HI1369	4	11	11p14.1	28,947,000	30,521,300	1,574,300	8	gain			yes	SLC17A6 NM_020346 KCNA4 NM_022233 F5H8 NM_001018080 F5H8 NM_000510 MPED2 NM_001	13.2%
NAAR010-E1-8264-201	2	11	11p13	34,393,300	34,576,200	182,900	4	gain				CAT NM_001752 ELF5 NM_001422 ELF5 NM_198381	0.0%
NAAR050-A9-02C11027	3	11	11p13	36,044,400	36,163,400	119,000	6	gain				LDLRAD3 NM_174902	0.0%
NAAR066-A7-HI0151	1	11	11p13	36,163,200	36,163,400	200	3	loss				LDLRAD3 NM_174902	0.0%
NAAR033-E3-3263.001	1	11	11p11.2	44,005,200	44,005,300	100	3	loss					0.0%
NAAR046-D6-01C08028	1	11	11p11.2	44,005,200	44,005,300	100	3	loss					0.0%
NAAR063-B1-HI1183_2	2	11	11p11.2	48,014,900	48,704,500	689,600	4	gain			yes	OR4B1 NM_001005470 OR4X2 NM_001004727 OR4S1 NM_001004725 PTPRJ	64.4%
NAAR022-E3-3011.005	1	11	11p11.12	49,879,900	50,595,000	715,100	7	gain	yes		yes	OR4C12 NM_001005270 OR4C13 NM_001001955	81.4%
NAAR068-E10-HI2858	2	11	11p11.12	49,879,900	50,418,400	538,500	6	gain	yes		yes	OR4C12 NM_001005270 OR4C13 NM_001001955	75.3%
NAAR068-E11-HI2859	2	11	11p11.12	49,879,900	50,595,000	715,100	7	gain	yes		yes	OR4C12 NM_001005270 OR4C13 NM_001001955	81.4%
NAAR033-H1-3259.002	1	11	11p11.12	50,096,900	50,595,000	498,100	6	gain					100.0%
NAAR056-C2-HI0799	1	11	11p11.12	50,096,900	50,595,000	498,100	6	gain	yes		yes		100.0%
NAAR056-C4-HI0801	1	11	11p11.12	50,096,900	50,595,000	498,100	6	gain	yes		yes		100.0%
NAAR068-F2-HI2862	2	11	11p11.12	50,096,900	50,595,000	498,100	6	gain	yes		yes		100.0%
NAAR022-B3-3011.002	1	11	11p11.12	50,123,600	50,595,000	471,400	4	gain	yes		yes		100.0%
NAAR001-A9-8002-202	7	11	11p11.12	50,418,000	50,595,000	177,000	3	loss			yes		100.0%
NAAR020-F12-HI1566	3	11	11p11.12	50,418,000	50,595,000	177,000	3	loss			yes		100.0%
NAAR024-A6-3062.001	1	11	11p11.12	50,418,000	50,595,000	177,000	3	gain			yes		100.0%
NAAR077-A1-04C37522	1	11	11p11.12	50,418,000	50,595,000	177,000	3	gain			yes		100.0%
NAAR062-B8-HI0792	1	11	11p11.12	51,247,900	51,319,500	71,600	4	gain				OR4A5 NM_001005272	0.0%
NAAR074-C12-04C35700	1	11	11p11.12	51,247,900	51,319,500	71,600	4	gain				OR4A5 NM_001005272	0.0%
NAAR077-G10-04C36260	1	11	11p11.12	51,247,900	51,319,500	71,600	4	gain				OR4A5 NM_001005272	0.0%
NAAR001-F11-8017-202	3	11	11q14.1	77,603,900	77,613,800	9,900	3	loss			yes	GAB2 NM_080491 GAB2 NM_012296	0.0%
NAAR032-B1-3221.001	2	11	11q14.1	77,603,900	77,613,800	9,900	3	loss				GAB2 NM_012296 GAB2 NM_080491	0.0%
NAAR070-F2-HI3113	1	11	11q14.1	77,603,900	77,613,800	9,900	3	loss				GAB2 NM_012296 GAB2 NM_080491	0.0%
NAAR071-D11-HI3185	5	11	11q14.1	77,603,900	77,613,800	9,900	3	loss				GAB2 NM_012296 GAB2 NM_080491	0.0%
NAAR025-A4-3081.002	1	11	11q14.1	77,613,700	77,613,800	100	2	loss				GAB2 NM_012296 GAB2 NM_080491	0.0%
NAAR050-C5-02C10098	1	11	11q14.1	77,613,700	77,613,800	100	2	loss				GAB2 NM_012296 GAB2 NM_080491	0.0%
NAAR061-D1-HI0414	1	11	11q14.1	77,613,700	77,613,800	100	2	loss				GAB2 NM_012296 GAB2 NM_080491	0.0%
NAAR041-H11-01C05483	1	11	11q14.3	90,508,600	91,674,400	1,165,800	3	loss			yes		13.3%
NAAR066-C10-HI2691	1	11	11q22.1	97,426,100	97,426,500	400	3	loss					0.0%
NAAR026-G7-3105.004	1	11	11q22.3	103,005,000	103,045,000	40,000	5	loss			yes		0.0%
NAAR020-D6-HI1175	1	11	11q22.3	103,928,000	104,733,000	805,000	8	gain	yes		yes	CASP4 NM_033306 COP1 NM_052889 CASP1 NM_033292 CASP1 NM_033294	24.8%
NAAR063-B2-HI1189	1	11	11q22.3	103,928,000	104,849,000	921,000	9	gain	yes		yes	COP1 NM_052889 CASP1 NM_033294 INCA NM_001007232 CASP4 NM_001122	21.7%
NAAR063-B3-HI1190	1	11	11q22.3	103,928,000	104,733,000	805,000	8	gain	yes		yes	COP1 NM_052889 CASP1 NM_033294 INCA NM_001007232 CASP4 NM_001122	24.8%
NAAR042-F9-01C05817	1	11	11q22.3	108,696,000	108,696,000	0	3	loss					0.0%
NAAR057-E5-HI1258	1	11	11q23.2 11q23.3 11q2	113,502,000	134,403,000	20,901,000	95	gain			yes	FEZ1 NM_022549 TMPRSS4 NM_019894 HSPA8 NM_153201 VDDX25 NM_0132f	8.0%
NAAR043-D12-01C06058	1	11	11q25	131,716,000	131,787,000	71,000	4	gain	yes				0.0%
NAAR052-B12-02C13222	1	11	11q25	131,716,000	131,787,000	71,000	4	gain	yes				0.0%
NAARCP2-A7-S-082-003	1	11	11q25	133,403,000	134,403,000	1,000,000	5	gain			yes	VPS26B NM_052875 THYNY1 NM_199298 B3GAT1 NM_018644 hCAP-D3 NM_01	6.1%
NAAR035-E11-1014-E11-P1	1	11	11q25	134,083,000	134,403,000	320,000	4	gain					19.2%
NAAR024-E10-3070.004	1	11	11q25	134,384,000	134,403,000	9,000	3	gain					0.0%
NAAR026-D2-3097.002	1	11	11q25	134,384,000	134,403,000	9,000	3	loss					0.0%
NAAR068-E3-HI2847	2	11	11q25	134,384,000	134,403,000	9,000	3	loss					0.0%
NAAR047-H5-02C09507	7	12	12p13.33	93,683	2,381,420	2,287,737	7	gain			yes	CACNA2D4 NM_001005766 RAB6IP2 NM_178040 FBXL14 NM_152441 IQSEC3	29.6%
NAAR051-C8-HI2443	1	12	12q24.12 12p13.33 11q	93,683	130,547,000	130,453,317	476	gain			yes	DKFZp434N2030 NM_001009894 A2ML1 NM_144670 ACVRL1 NM_000020 CAC	11.4%
NAAR051-D7-HI2588	3	12	12p13.33 12p13.32 11q	93,683	5,363,380	5,269,697	16	gain			yes	CACNA2D4 NM_001005766 FOXO1 NM_021953 NRIP2 NM_031474 RAB6IP2 NM	16.1%
NAAR060-C5-HI2203	1	12	12q24.12 12p13.33 11q	93,683	130,547,000	130,453,317	476	gain			yes	DKFZp434N2030 NM_001009894 A2ML1 NM_144670 ACVRL1 NM_000020 CAC	11.4%
NAAR047-H5-02C09507	7	12	12p13.31 12p13.2 11q	6,755,670	20,833,400	14,077,730	47	gain			yes	A2ML1 NM_144670 GPRC5A NM_003979 C2F2 NM_006331 C12orf22 NM_01326f	18.2%
NAAR052-E12-HI0570	1	12	12p13.2 12p13.1 12p1	11,478,900	15,569,400	4,090,500	11	gain			yes	MANSC1 NM_018050 KIAA1467 NM_020853 GUCY2C NM_004963 FLJ32115 NJ	8.1%
NAAR056-B8-HI0776	2	12	12p12.3 12p12.2 12p1	15,569,400	29,247,000	13,677,600	62	gain			yes	KRAS NM_004985 STRAP NM_007178 SLC10A2 NM_021094 LMO3 NM_01864	10.6%
NAAR051-D7-HI2588	3	12	12p12.3 12p12.2 12p1	16,436,500	33,857,800	17,421,300	72	gain			yes	KRAS NM_004985 IBICD1 NM_001714 SLC10A2 NM_021094 LMO3 NM_01864	14.8%
NAAR017-C4-HI2209	3	12	12p12.3 12p12.2	16,850,400	20,433,300	3,582,900	21	gain			yes	CAPZA3 NM_033328 PLCZ1 NM_033123 PIK3C2G NM_004570 AEBP2 NM_153	2.5%
NAAR047-H5-02C09507	7	12	12p12.1 12p11.23 11q	23,744,300	71,727,000	47,982,700	181	gain			yes	ACVRL1 NM_000020 KRAS NM_004985 IC1QL4 NM_001008223 CPM NM_1983	14.7%
NAAR047-E2-01C08482	1	12	12p11.23	27,470,200	27,495,700	25,500	3	gain	yes				0.0%
NAAR047-E5-01C08485	1	12	12p11.23	27,470,200	27,495,700	25,500	3	gain	yes				0.0%
NAAR068-F7-HI2868	2	12	12p11.1	33,306,200	33,857,800	551,600	5	gain			yes	SYT10 NM_198992	95.1%
NAAR058-G2-HI1618	1	12	12p11.1 12q11.1 12q12	33,674,600	36,727,000	3,052,400	12	gain			yes	ALG10 NM_032834	53.6%
NAAR062-E12-HI0998	1	12	12p11.1	33,674,600	33,857,800	183,200	3	gain			yes		100.0%
NAAR028-D6-3139.003	1	12	12q11.1 12q12	36,491,900	37,417,300	925,400	12	gain			yes	KCR1 NM_001013620 CPNE8 NM_153634	90.1%
NAAR030-F1-3177.005	1	12	12q11.1 12q12	36,491,900	36,978,800	486,900	10	gain			yes		100.0%
NAAR060-G7-HI2365	1	12	12q11.1 12q12	36,491,900	36,978,800	486,900	10	gain			yes		100.0%
NAAR001-A9-8002-202	7	12	12q12	36,506,000	37,162,800	656,800	10	loss			yes	KCR1 NM_001013620	100.0%
NAAR004-B12-8080-201	2	12	12q12	36,506,000	36,697,300	191,300	7	loss			yes		100.0%
NAAR027-B11-3128.001	1	12	12q12	36,506,000	36,697,300	191,300	7	loss					

Sample ID	CNV/sample	Chr	Cytoband	Start	Stop	Size	#SNPs/segment	CNV	Familial	Mendelian error	dGV	RefGene	% overlap
NAAR020-F12-H1566	3	12	12q12	36,694,800	36,697,300	2,500	3	loss			yes		100.0%
NAAR052-F6-H10682	3	12	12q24.12/12q13.11/12q12	44,378,800	130,547,000	86,168,200	321	gain	yes	yes	yes	DKFZp434N2030JNM_001009894tACVRL1JNM_000020tC1QL4JNM_001008223tK	7.8%
NAAR071-D11-H13185	5	12	12q14.1/12q14.2/12q14.3	56,343,000	67,695,700	11,352,700	51	gain			yes	CPM1JNM_198320tMARCH9JNM_138396tHMG2JNM_003483tXPOTJNM_007235t	11.7%
NAAR033-F1-3258.001	1	12	12q14.1	58,858,000	59,736,400	878,400	4	loss	yes		yes		0.3%
NAAR033-G1-3258.004	1	12	12q14.1	58,858,000	59,736,400	878,400	4	loss	yes	yes	yes		0.3%
NAAR051-D7-H12588	3	12	12q14.2/12q14.3/12q12q2	60,710,000	108,358,000	47,648,000	198	gain			yes	DKFZp434N2030JNM_001009894tCPM1JNM_198320tACTR6JNM_022496tIARL1JN	5.1%
NAAR017-C4-H12209	3	12	12q21.1/12q21.2/12q12q2	70,242,300	90,170,400	19,928,100	62	gain			yes	DKFZp434N2030JNM_001009894tKNC2JNM_139136tPPFIA2JNM_003625tINAP	5.7%
NAAR071-D11-H13185	5	12	12q21.1/12q21.2/12q12q2	70,242,300	79,331,100	9,088,800	35	gain			yes	TRHDEJNM_013381tE2F7JNM_203394tHRB2JNM_007043tICAPS2JNM_032606tIN	7.1%
NAAR001-A9-8002-202	7	12	12q21.1	71,222,200	71,727,000	504,800	3	loss			yes	TRHDEJNM_013381	60.0%
NAAR047-H5-02C09507	7	12	12q24.12/12q21.32/12q12	83,493,800	126,600,000	43,106,200	162	gain			yes	DKFZp434N2030JNM_001009894tU1SNRNPBPJNM_007020tUUAUK1JNM_014840t	2.9%
NAAR056-B8-H10776	2	12	12q21.31/12q21.32/12q12	83,715,600	89,930,400	6,214,800	14	gain			yes	DKFZp434N2030JNM_001009894tDUSP6JNM_001946tDSPG3JNM_004950tLRR1	3.0%
NAAR071-D11-H13185	5	12	12q22/12q23.1	92,066,400	94,702,100	2,635,700	16	gain			yes	SOC52JNM_003877tMETAP2JNM_006838tINTN4JNM_021229tICRADJNM_0038C	0.9%
NAAR071-D11-H13185	5	12	12q23.3/12q24.11	106,721,000	108,358,000	1,637,000	10	gain			yes	MGC90512JNM_001001655tACACB3JNM_001093tINFINJNM_213595tFOXN4JNM	0.9%
NAAR064-H9-H12140	1	12	12q24.31/12q24.32/12q12	121,620,000	130,547,000	8,927,000	30	gain			yes	GPR109BjNM_006018tIKAA0318JNM_015347tARL6IP4JNM_018694tFLJ39378JN	21.6%
NAAR001-C9-8009-101	1	12	12q24.32	126,197,000	127,369,000	1,172,000	10	gain			yes		0.7%
NAAR047-H5-02C09507	7	12	12q24.32	126,951,000	127,164,000	213,000	2	loss					0.0%
NAAR047-H5-02C09507	7	12	12q24.32	126,951,000	127,289,000	917,000	7	gain					34.6%
NAAR028-C3-3133.003	1	12	12q24.33	128,620,000	128,999,000	379,000	4	loss			yes	FLJ31978JNM_144669tIKAA1944JNM_133448tISLC15A4JNM_145648	100.0%
NAAR047-H5-02C09507	7	12	12q24.33	128,999,000	130,547,000	1,548,000	4	loss			yes	IKAA0318JNM_015347tPIWIL1JNM_004764tIEPIJNM_001980tIFZD10JNM_00719	60.9%
NAAR035-F9-1014-F9-P1	1	13	13q12.11	18,867,500	18,867,500	0	2	gain					0.0%
NAAR041-F10-00C04574	2	13	13q12.12	22,502,100	23,692,300	1,190,200	9	gain	yes			SGCGJNM_000231tSPATA13JNM_153023tISACSJNM_014363tFLJ46358JNM_207	0.0%
NAAR041-F9-00C04573	1	13	13q12.12	22,502,100	23,692,300	1,190,200	9	gain	yes			SGCGJNM_000231tSPATA13JNM_153023tISACSJNM_014363tFLJ46358JNM_207	0.0%
NAAR051-G1-H12618	1	13	13q12.12	22,502,100	23,692,300	1,190,200	9	gain				SGCGJNM_000231tSPATA13JNM_153023tISACSJNM_014363tFLJ46358JNM_207	0.0%
NAAR047-H1-02C09502	8	13	13q13.1/13q13.2	32,884,200	33,883,200	999,000	6	gain			yes	SCG3JNM_002915tRFC3JNM_181558	11.6%
NAAR051-F7-H12612	2	13	13q13.1/13q13.2	32,884,200	33,883,200	999,000	6	gain			yes	RFC3JNM_181558tRFC3JNM_002915	11.6%
NAAR054-F3-H10298	1	13	13q14.2	47,048,100	47,569,100	521,000	8	gain	yes			NUDT15JNM_018283tMED4JNM_014166tISUCLA2JNM_003850	0.0%
NAAR054-F4-H10299	1	13	13q14.2	47,048,100	47,569,100	521,000	8	gain	yes			NUDT15JNM_018283tMED4JNM_014166tISUCLA2JNM_003850	0.0%
NAAR010-A8-8252-101	1	13	13q21.2	59,820,300	60,629,400	809,100	8	gain				TDRD3JNM_030794	0.0%
NAAR031-G7-3212.003	1	13	13q21.31/13q21.32	63,529,600	65,319,400	1,789,800	9	gain	yes		yes		69.2%
NAAR031-A8-3212.005	2	13	13q21.32	64,798,700	65,319,400	520,700	6	gain	yes		yes		94.8%
NAAR044-C3-01C06329	1	13	13q21.32	65,120,700	65,951,300	830,600	5	gain	yes		yes	PCDH9JNM_020403tPCDH9JNM_203487	26.4%
NAAR044-C5-01C06331	1	13	13q21.32	65,120,700	65,951,300	830,600	5	gain	yes		yes	PCDH9JNM_020403tPCDH9JNM_203487	26.4%
NAAR064-A8-H11697	4	13	13q22.1/13q22.2/13q2	69,845,500	114,040,000	44,194,500	214	gain			yes	KLF12JNM_016285tRPA2JNM_021033tZIC5JNM_033132tIC13orf7JNM_024546tK	12.5%
NAAR072-F11-200501053	3	13	13q31.1	80,722,400	82,292,200	1,569,800	9	gain			yes		15.6%
NAAR047-H1-02C09502	8	13	13q31.1	83,604,500	84,667,000	1,062,500	6	gain			yes		20.8%
NAAR065-H7-H12478	2	13	13q32.1/13q32.2	95,348,800	97,815,200	2,466,400	5	gain			yes	RAP2AJNM_021033tIFARP1JNM_001001715tHSP90B1JNM_001014441tMBNL2JN	1.7%
NAAR072-F11-200501053	3	13	13q33.1/13q33.2	103,629,000	104,277,000	648,000	7	loss			yes		0.6%
NAAR036-E10-1014-E10-P2	3	14	14q11.2	21,305,700	21,719,200	413,500	9	gain			yes	MGC40069JNM_182615	34.4%
NAAR038-D6-1015-D6-P1	1	14	14q11.2	21,305,700	21,719,200	413,500	9	gain			yes	MGC40069JNM_182615	34.4%
NAAR060-D12-H12253	1	14	14q12	24,430,200	26,370,200	1,940,000	13	gain			yes	NOVA1JNM_002515tNOVA1JNM_006491tSTXBP6JNM_014178tNOVA1JNM_0064	10.2%
NAAR003-G12-8071-201	1	14	14q12	24,835,400	26,578,900	1,743,500	12	gain			yes	NOVA1JNM_006489tNOVA1JNM_002515tNOVA1JNM_006491	11.4%
NAAR010-E1-8264-201	2	14	14q12	24,835,400	25,548,500	713,100	6	gain			yes		24.9%
NAAR065-H7-H12478	2	14	14q21.1/14q21.2	42,414,300	45,689,300	3,275,000	6	gain			yes	C14orf28JNM_001017923tIFKBP3JNM_002013tC14orf106JNM_018353tC14orf155t	25.9%
NAAR025-A11-3091.002	1	14	14q23.1/14q23.2/14q2	60,168,400	69,827,500	9,659,100	35	gain			yes	SYNE2JNM_182914tZFYVE26JNM_015346tSYNE2JNM_182910tSYNE2JNM_182E	0.5%
NAAR063-F7-H11544	1	14	14q23.2/14q23.3	61,897,100	65,075,600	3,178,500	11	gain			yes	SYNE2JNM_182914tKCNH5JNM_139318tSPTB1JNM_000347tFUT8JNM_004480tF	0.5%
NAAR063-E9-H11500	1	14	14q31.1/14q31.2/14q12q2	80,741,900	87,019,000	6,277,100	43	gain			yes	GTF2AJNM_201595tISEL1JNM_005065tSTN2JNM_033104tFLRT2JNM_013231tF	11.8%
NAAR062-D4-H10888	4	14	14q31.2/14q31.3	83,114,500	84,447,600	1,333,100	9	gain			yes		11.8%
NAAR073-G10-04C35576	1	14	14q31.3/14q32.1/14q12	85,945,100	106,312,000	20,366,900	79	gain			yes	EVLJNM_016337tXRC3JNM_005432tC14orf139JNM_024633tC14orf48JNM_1527	12.3%
NAAR036-E11-1014-E11-P2	5	14	14q31.3	87,435,700	87,555,500	119,800	2	gain			yes	GPR65JNM_003608tIGALCJNM_000153	32.7%
NAAR070-G10-H13137	1	14	14q32.2	96,309,000	96,346,800	37,800	2	gain				VRK1JNM_003384	0.0%
NAAR002-E3-8026-204	2	15	15q11.2	21,490,300	22,083,700	593,400	9	gain			yes		47.5%
NAAR024-B7-3064.003	1	15	15q11.2/15q12	21,490,300	25,698,400	4,208,100	18	gain	yes		yes	SNRPNJNM_022806tSNRPNJNM_022807tUBE3AJNM_130839tOCA2JNM_00027E	30.7%
NAAR024-C7-3064.004	1	15	15q11.2/15q12	21,490,300	25,698,400	4,208,100	18	gain	yes		yes	SNRPNJNM_022806tSNRPNJNM_022807tUBE3AJNM_130839tOCA2JNM_00027E	30.7%
NAAR039-C9-1021-C9-P3	2	15	15q11.2/15q12	21,490,300	25,698,400	4,208,100	18	gain			yes	SNRPNJNM_022806tSNRPNJNM_022807tUBE3AJNM_130839tOCA2JNM_00027E	30.7%
NAAR039-E9-1012-F2-PA	1	15	15q11.2/15q12	21,490,300	25,698,400	4,208,100	18	gain			yes	SNRPNJNM_022806tSNRPNJNM_022807tUBE3AJNM_130839tOCA2JNM_00027E	30.7%
NAAR065-E6-H10302	1	15	15q11.2/15q12	21,490,300	25,698,400	4,208,100	18	gain	yes		yes	SNRPNJNM_022806tSNRPNJNM_022807tSNRPNJNM_022805tGABRA5JNM_000	30.7%
NAAR065-E7-H10304	1	15	15q11.2/15q12	21,490,300	25,698,400	4,208,100	18	gain	yes		yes	SNRPNJNM_022806tSNRPNJNM_022807tSNRPNJNM_022805tGABRA5JNM_000	30.7%
NAARCP2-D8-20012666	1	15	15q11.2	21,490,300	21,597,600	107,300	3	gain					0.0%
NAAR015-C12-F-016-003	1	15	15q11.2	21,885,600	22,083,700	198,100	6	gain			yes		100.0%
NAAR024-A7-3064.002	1	15	15q11.2/15q12	21,885,600	25,698,400	3,812,800	15	gain	yes		yes	SNRPNJNM_022806tSNRPNJNM_022807tUBE3AJNM_130839tOCA2JNM_00027E	31.6%
NAAR046-F11-01C08067	1	15	15q11.2	21,885,600	22,083,700	198,100	6	loss		yes	yes		100.0%
NAAR058-G1-H11616	1	15	15q11.2	21,885,600	22,083,700	198,100	6	gain			yes		100.0%
NAAR077-D7-04C38331	5	15	15q11.2	21,920,700	22,083,700	163,000	5	gain			yes		100.0%
NAAR052-E6-H10308	1	15	15q12	23,325,300	24,495,700	1,170,400	4	gain			yes	GABRB3JNM_021912tUATP10AJNM_024490tGABRB3JNM_000814	14.3%
NAAR064-F5-H12040	5	15	15q12	23,325,300	23,325,400	100	3	gain					0.0%
NAAR031-B5-3206.001	5	15	15q12	24,833,700	25,039,100	205,400	2	loss			yes	GABRG3JNM_033223	6.3%
NAAR078-A3-200305415	9	15	15q22.1/15q22.23/15q15c	49,345,700	100,170,000	50,824,300	190	gain					

Sample ID	CNV/sample	Chr	Cytoband	Start	Stop	Size	#SNPs/segment	CNV	Familial	Mendelian error	dGV	RefGene	% overlap
NAAR032-B1-3221.001	2	16	16q22.3	73,431,000	73,431,100	100	2	loss					0.0%
NAAR033-E12-3277.001	1	16	16q22.3	73,431,000	73,431,100	100	2	loss					0.0%
NAAR044-C9-01C06335	1	16	16q22.3	73,431,000	73,431,100	100	2	loss					0.0%
NAAR048-B12-02C09663	1	16	16q22.3	73,431,000	73,547,600	116,600	4	loss				WDR59[NM_030581	0.0%
NAAR058-H6-HI1660	3	16	16q22.3	73,431,000	73,547,600	116,600	4	gain				WDR59[NM_030581	0.0%
NAAR073-B1-03C15328	2	16	16q22.3	73,431,000	73,547,600	116,600	4	loss				WDR59[NM_030581	0.0%
NAARCP2-E12-HI1728	1	16	16q22.3	73,431,000	73,547,600	116,600	4	loss				WDR59[NM_030581	0.0%
NAAR002-A4-8025-111	1	16	16q23.1	74,542,400	74,727,000	184,600	5	gain			yes		6.4%
NAAR030-D3-3179.007	1	16	16q23.1	74,542,400	74,727,000	184,600	5	gain			yes		6.4%
NAAR017-D4-HI2243	1	16	16q23.3	81,327,500	82,050,200	722,700	5	gain				CDH13[NM_001257	0.0%
NAAR001-D12-8012-111	1	17	17p12	14,304,400	15,237,700	933,300	10	loss	yes		yes	PMP22[NM_153322]PMP22[NM_000304]TEKT3[NM_031898]FLJ45831[NM_001C	100.0%
NAAR028-B4-3135.002	1	17	17p12	14,304,400	15,237,700	933,300	10	loss	yes		yes	PMP22[NM_153322]FLJ45831[NM_001001684]TEKT3[NM_031898]PMP22[NM_1	100.0%
NAAR028-C4-3135.003	1	17	17p12	14,304,400	15,237,700	933,300	10	loss	yes	yes	yes	PMP22[NM_153322]FLJ45831[NM_001001684]TEKT3[NM_031898]PMP22[NM_1	100.0%
NAAR028-D4-3135.004	1	17	17p12	14,304,400	15,237,700	933,300	10	loss	yes	yes	yes	PMP22[NM_153322]FLJ45831[NM_001001684]TEKT3[NM_031898]PMP22[NM_1	100.0%
NAAR068-B11-HI1405	2	17	17p12	14,304,400	15,237,700	933,300	10	gain	yes		yes	PMP22[NM_153322]TEKT3[NM_031898]PMP22[NM_153322]FLJ45831[NM_001C	100.0%
NAAR068-B12-HI1404	2	17	17p12	14,304,400	15,237,700	933,300	10	gain	yes		yes	PMP22[NM_153322]TEKT3[NM_031898]PMP22[NM_153322]FLJ45831[NM_001C	100.0%
NAAR001-E1-8012-201	1	17	17p12	14,432,900	15,237,700	804,800	9	loss	yes		yes	PMP22[NM_153322]PMP22[NM_000304]TEKT3[NM_031898]FLJ45831[NM_001C	100.0%
NAAR045-A5-01C06730	3	17	17p12	14,681,500	15,108,700	417,200	4	gain			yes	PMP22[NM_153322]PMP22[NM_153322]PMP22[NM_000304]TEKT3[NM_031898]FLJ45831[NM_001C	100.0%
NAAR063-A12-HI1182	1	17	17q12	29,183,000	29,706,600	523,600	3	gain				ACCN1[NM_001084]CCL7[NM_006273]ICL2[NM_002982]CCL11[NM_002986]IC	0.0%
NAAR050-A9-02C11027	3	17	17q12	30,711,500	30,770,900	59,400	2	loss				FLJ10260[NM_018042]FLJ34922[NM_152270	0.0%
NAAR003-A5-8047-202	4	17	17q21.1	41,174,200	41,174,200	0	88	gain		yes	yes	KRTHA7[NM_003770]FLJ34306[NM_199340]ICD79B[NM_021602]CAC3[NM_00	18.2%
NAAR030-H11-3197.001	1	17	17q22	48,416,700	48,608,800	192,100	6	loss			yes		100.0%
NAAR067-D10-HI2765	2	18	18p11.32	1,564,270	1,807,190	242,920	8	gain	yes				0.0%
NAAR067-D12-HI2767	2	18	18p11.32	1,564,270	1,964,310	400,040	10	gain	yes		yes		3.7%
NAAR076-D4-04C36611	1	18	18p11.32	1,748,000	1,807,190	59,190	4	loss					0.0%
NAAR071-D10-HI3184	1	18	18p11.22	8,514,940	8,514,940	0	2	loss					0.0%
NAAR022-D7-3018.005	3	18	18p11.22	10,142,900	18,307,400	8,164,500	16	gain			yes	C18orf58[NM_173817]KIAA1772[NM_024935]MGC26718[NM_001029999]PTPN2	22.3%
NAAR022-A10-3023.004	1	18	18p11.21	10,741,600	11,601,400	859,800	7	gain	yes			C18orf58[NM_173817	0.0%
NAAR022-G9-3023.002	1	18	18p11.21	10,741,600	11,601,400	859,800	7	gain	yes			C18orf58[NM_173817	0.0%
NAAR022-H9-3023.003	1	18	18p11.21	10,741,600	11,601,400	859,800	7	gain	yes			C18orf58[NM_173817	0.0%
NAAR001-F11-8017-202	3	18	18p11.21	11,554,300	11,601,400	47,100	3	loss					0.0%
NAAR036-E10-1014-E10-P2	3	18	18q11.2	18,307,400	18,529,700	222,300	4	gain					0.0%
NAAR050-H11-HI2539	2	18	18q11.2	18,307,400	18,529,700	222,300	4	gain					0.0%
NAAR058-D6-HI1540	6	18	18q11.2	18,307,400	18,529,700	222,300	4	gain					0.0%
NAAR022-D7-3018.005	3	18	18q12.1	23,452,600	37,808,900	14,356,300	65	gain			yes	GALNT1[NM_020474]IDTNA[NM_032980]IDSC3[NM_024423]IDTNA[NM_001390]I	14.9%
NAAR028-G6-3140.002	1	18	18q12.1	27,086,600	27,580,600	493,000	4	gain			yes	DSG4[NM_177968]IDSG2[NM_001943]IB4GALT6[NM_004775]IDSG3[NM_001944]	0.2%
NAAR031-A8-3212.005	2	18	18q12.2	32,374,000	32,510,700	136,700	4	loss	yes		yes	FHOD3[NM_025135	100.0%
NAAR031-E7-3212.001	1	18	18q12.2	32,374,000	32,510,700	136,700	4	loss	yes		yes	FHOD3[NM_025135	100.0%
NAAR027-G6-3121.002	1	18	18q12.2	34,993,000	35,619,700	626,700	5	loss	yes				0.0%
NAAR036-B11-1014-B11-P2	1	18	18q12.2	34,993,000	35,619,700	626,700	5	loss	yes	yes			0.0%
NAAR022-D7-3018.005	3	18	18q21.33	59,524,800	65,213,000	5,688,200	27	gain			yes	CDH19[NM_021153]ICDH7[NM_033646]SERPINB8[NM_00103184]C18orf14[NM	16.4%
NAAR030-C12-3198.001	2	19	19p13.3	3,542,590	15,912,900	12,370,310	20	gain	yes		yes	NDUFA11[NM_175614]ZNF441[NM_152355]ITCAM1[NM_182919]FLJ90396[NM_	10.2%
NAAR030-D12-3198.002	5	19	19p13.3	3,542,590	16,332,900	12,790,310	23	gain	yes		yes	NDUFA11[NM_175614]ZNF441[NM_152355]ITCAM1[NM_182919]FLJ90396[NM_	9.8%
NAAR020-B4-HI0937	1	19	19q12	32,869,600	33,398,500	528,900	7	gain			yes		100.0%
NAAR068-F1-HI2861	2	19	19q12	32,869,600	33,210,000	340,400	5	gain			yes		100.0%
NAAR071-F1-04C33149	1	19	19q13.11	37,946,700	39,375,900	1,429,200	8	gain			yes	PEPD[NM_000285]SLC7A9[NM_014270]CEBPG[NM_001806]LRP3[NM_002333]	56.3%
NAAR030-D12-3198.002	5	19	19q13.12	40,749,500	63,437,700	22,688,200	72	gain			yes	KIAA1559[NM_020917]MGC70924[NM_199285]SYMYPK[NM_004819]ZNF223[NM	21.1%
NAAR009-B6-8163-201	1	19	19q13.21	48,066,400	48,163,400	97,000	2	gain			yes	PSG7[NM_002783]PSG1[NM_006905]PSG6[NM_001031850]PSG6[NM_002782	100.0%
NAAR017-C1-HI2201	3	19	19q13.21	48,066,400	48,163,400	97,000	2	gain			yes	PSG7[NM_002783]PSG1[NM_006905]PSG6[NM_001031850]PSG6[NM_002782	100.0%
NAAR027-D4-3118.002	3	19	19q13.41	56,203,700	56,276,400	72,700	4	gain				KLK13[NM_015596]KLK10[NM_002776]KLK12[NM_145895]KLK9[NM_012315]IK	0.0%
NAAR031-F7-3212.002	2	19	19q13.41	56,593,300	57,641,200	1,047,900	7	gain			yes	SICLEC3[NM_198845]ZNF613[NM_00103172]ZNF614[NM_025040]SICLEC12	58.5%
NAAR041-G10-01C05471	2	20	20p13	95,685	1,358,480	1,262,795	6	gain	yes			TCF15[NM_004609]SRXN1[NM_080725]PSMF1[NM_178578]TRIB3[NM_021158]	23.9%
NAAR041-G7-01C05468	2	20	20p13	95,685	691,220	595,535	4	gain	yes		yes	TCF15[NM_004609]SRXN1[NM_080725]TRIB3[NM_021158]C20orf118[NM_03122	50.7%
NAAR052-B6-02C13146	1	20	20p12.3	7,830,110	8,757,230	927,120	9	gain			yes	TNXC213[NM_021156]HAO1[NM_017545]PCLB1[NM_015192]PCLB1[NM_1827	64.0%
NAAR051-D5-HI2455	1	20	20q11.21	29,310,100	29,470,000	159,900	2	gain			yes	DEFB121[NM_001011878]DEFB119[NM_173460]DEFB118[NM_054112]DEFB11	0.0%
NAAR061-D2-HI0427	2	20	20q13.2	51,292,700	52,138,700	846,000	3	gain			yes	ZNF218[NM_173485]BCAS1[NM_003657]ZNF217[NM_006526	1.1%
NAAR041-A2-99C00465	4	20	20q13.33	59,180,200	59,682,100	501,900	5	gain			yes	CDH4[NM_001794	0.0%
NAAR006-B2-8127-203	1	21	21q11.2	13,520,500	46,782,200	33,261,700	165	gain			yes	ATP5J[NM_001003896]CRYZL1[NM_145858]CLDN14[NM_144492]C21orf18[NM]	10.8%
NAAR010-H3-8273-202	1	21	21q11.2	13,520,500	13,574,800	54,300	2	gain			yes		100.0%
NAAR065-D2-HI2316	1	21	21q11.2	13,520,500	46,782,200	33,261,700	165	gain			yes	ATP5J[NM_001003896]CRYZL1[NM_145858]CLDN14[NM_144492]COL6A2[NM]	10.8%
NAAR017-C1-HI2201	3	21	21q22.11	30,538,900	30,983,100	444,200	8	gain	yes			KRTAP19-4[NM_181610]KRTAP19-6[NM_181612]KRTAP19-5[NM_181611]KRTA	0.0%
NAAR017-C2-HI2202	1	21	21q22.11	30,538,900	30,983,100	444,200	8	gain	yes			KRTAP19-4[NM_181610]KRTAP19-6[NM_181612]KRTAP19-5[NM_181611]KRTA	0.0%
NAAR066-E3-HI2698	1	21	21q22.12	36,049,900	36,344,800	294,900	5	gain				C21orf18[NM_001007258]C21orf18[NM_001007261]C21orf18[NM_001007262]C2	0.0%
NAAR059-C7-HI1876	1	21	21q22.12	36,447,400	36,479,700	32,300	2	gain				C21orf18[NM_005128	0.0%
NAAR050-H6-HI2534	2	21	21q22.3	46,014,600	46,782,200	767,600	3	gain			yes	COL6A2[NM_001849]C21orf56[NM_032261]COL6A1[NM_001848]IFTCD[NM_206	10.0%
NAAR069-A4-HI2923	1	21	21q22.3	46,751,900	46,782,200	30,300	2	gain				DIP2A[NM_206891]DIP2A[NM_015151]DIP2A[NM_206890]DIP2A[NM_206889	0.0%
NAAR030-C8-3183.007	1	22	22q11.21	17,506,900	19,774,000	2,267,100	4	loss			yes	MRPL40[NM_003776]ICLCTL1[NM_007098]UFDF1[NM_001035247]IDGCR6L[NM]	20.7%
NAAR063-B1-HI183_2	2	22	22q11.21	17,506,900	20,306,800	2,799,900	5	gain	yes		yes	MRPL40[NM_003776]ICLCTL1[NM_007098]UFDF1[NM_001035247]IDGCR6L[NM]	30.1%
NAAR063-A10-HI1180	1	22	22q11.21	18,008,700	19,774,000	1,765,300	3	gain	yes		yes	SCARF2[NM_153334]SEPT5[NM_002688]PIK4CA[NM_058004]TBB1[NM_00599	26.6%
NAAR074-A11-04C35671	2	22	22q12.1	26,638,100	27,802,400	1,164,300	4	gain				KREMEN1[NM_032045]CHEK2[NM_007194]CHEK2[NM_145862]KREMEN1[NM_	0.0%
NAAR047-C7-01C08457	1	22	22q13.32	47,196,500	48,006,700	810,200	4	gain			yes	FAM19A5[NM_015381	4.8%
NAAR001-G4-8018-201	1	22	22q13.32	47,765,700	48,006,700	241,000	3	loss			yes		12.1%
NAAR010-E3-8264-203	1	22	22q13.32	47,765,700	48,006,700	241,000	3	gain			yes		12.1%
NAAR072-F11-200501053	3	22	22q13.32	48,004,600	48,881,300	876,700	5	loss	yes		yes	FLJ41993[NM_001001694]MLC1[NM_139202]PIM3[NM_001001852]CRELD2[NM	3.0%
NAAR073-B1-03C15328	2	22	22q13.32	47,765,700	48,881,300	1,115,600	5	loss	yes		yes	FLJ41993[NM_001001694]MLC1[NM_139202]PIM3[NM_001001852]CRELD2[NM	3.0%
NAAR074-H9-													

Mapping autism risk loci using genetic linkage and chromosomal rearrangements (The Autism Genome Project (AGP) Consortium)

Supplementary Table 2. List of 254 CNVs in Affected Individuals.

Supplementary Table 5: List of 254 CNVs in Affected Individuals (NCBI Build 35)

Sample ID	CNV/sample	Chr	Cytoband	Start	Stop	Size	#SNPs/segment	CNV	Familial	Mendelian error	dGV	RefGene	% overlap
NAAR065-D7-HI2326	2	1	1p36.12	21,400,700	21,625,400	224,700	2	gain			yes		100.0%
NAAR074-A7-04C35667	5	1	1p31.3	60,389,500	61,350,000	960,500	6	gain	yes		yes	MGC40069 NM_182615	34.4%
NAAR074-D1-04C35701	1	1	1p31.3	60,629,100	61,350,000	720,900	5	gain	yes				0.0%
NAAR003-D2-8055-204	1	1	1p21.2	101,987,000	101,998,000	11,000	3	loss				KIFC3 NM_005550 MMP15 NM_002428 GPR56 NM_005682 TEPP NM_005682 SIGLEC6 NM_198845 ZNF613 NM_001031721 ZNF614 NM_025040 SIC	0.0%
NAAR066-H6-HI2815	1	1	1p21.1	105,739,000	105,801,000	62,000	3	gain			yes		58.5%
NAAR007-D5-8172-201	1	1	1q21.1	143,780,000	144,894,000	1,114,000	7	gain	yes		yes	ADCY2 NM_020546 NSUN2 NM_017755 IRX1 NM_024337 ICE1 NM_17E	13.2%
NAAR007-D6-8172-202	1	1	1q21.1	143,780,000	144,894,000	1,114,000	7	gain	yes		yes	LOC134147 NM_138809 CTNND2 NM_001332 LOC134145 NM_199133	18.2%
NAAR025-E10-3090.002	1	1	1q21.1	143,780,000	144,479,000	699,000	6	gain			yes		53.8%
NAAR048-G5-02C09922	1	1	1q21.1	143,780,000	144,894,000	1,114,000	7	gain			yes	SNRPN NM_022806 SNRPN NM_022807 UBE3A NM_130839 OCA2 NM	30.7%
NAAR070-D8-HI3079	1	1	1q21.1	143,780,000	144,894,000	1,114,000	7	loss	yes			APIN NM_017855 C4orf7 NM_152997 UCSN3 NM_005212	0.0%
NAAR006-A3-8125-201	6	1	1q23.3	158,901,000	159,090,000	189,000	6	gain			yes		47.5%
NAAR069-H9-04C29142	3	1	1q23.3	158,901,000	159,599,000	698,000	7	gain			yes		100.0%
NAAR058-E4-HI1581	1	1	1q31.1	185,134,000	185,838,000	704,000	7	loss	yes		yes	PMP22 NM_153322 FLJ45831 NM_001001684 TEKT3 NM_031898 PMF	100.0%
NAAR048-G6-02C09923	2	1	1q42.3	232,746,000	232,746,000	0	2	loss			yes		30.7%
NAAR043-F6-01C06146	1	2	2p25.3	1,725,230	1,743,780	18,550	3	gain	yes			HTR1F NM_000866 CGGBP1 NM_00100390 CGGBP1 NM_003663 ZN	0.0%
NAAR043-F7-01C06147	1	2	2p25.3	1,725,230	1,743,780	18,550	3	gain	yes			C18orf58 NM_173817	0.0%
NAAR056-F7-HI0995	1	2	2p24.3	14,316,000	15,674,900	1,358,900	11	gain			yes		100.0%
NAAR032-G1-3222.004	2	2	2p24.1	21,249,500	22,833,700	1,584,200	7	gain	yes				0.0%
NAAR067-F3-HI1481	4	2	2p22.3	32,986,100	33,204,100	218,000	3	gain					0.0%
NAAR010-E6-8265-201	1	2	2p16.3	51,891,200	52,313,100	421,900	4	gain				TMEM16E NM_213599 SLC17A6 NM_020346	14.7%
NAAR043-H6-01C06231	4	2	2p16.1	58,068,200	59,840,200	1,772,000	6	gain			yes		100.0%
NAAR078-C9-F-031-003	1	2	2p12	79,137,200	79,137,300	100	2	loss			yes		78.3%
NAAR071-G6-04C33169	1	2	2p11.2	83,832,600	84,397,700	565,100	7	gain			yes		100.0%
NAAR003-A5-8047-202	4	2	2p11.2	88,993,300	88,993,400	100	2	loss			yes		12.1%
NAAR003-F10-8064-201	1	2	2p11.2	88,993,300	88,993,400	100	2	loss			yes		6.4%
NAAR052-E11-HI0559	1	2	2q12.1	104,863,000	104,863,000	0	3	loss			yes	ASTN2 NM_198187 ASTN2 NM_014010 ASTN2 NM_198188 ASTN2 NM	15.0%
NAAR052-G3-HI0186	1	2	2q12.3	106,922,000	107,678,000	756,000	7	gain			yes	ANKRD15 NM_153186 DMRT2 NM_181872 DMRT1 NM_021951 DMRT.	68.9%
NAAR022-E8-3020.004	1	2	2q13	111,333,000	112,712,000	1,379,000	6	gain	yes		yes	SUCLG2 NM_003848 FAM19A4 NM_001005527 FAM19A1 NM_213609	2.1%
NAAR015-H9-R-103-008	1	2	2q22.3	145,475,000	145,587,000	112,000	3	gain			yes	C2orf10 NM_194250	14.5%
NAAR001-A9-8002-202	7	2	2q24.1	154,759,000	155,131,000	372,000	4	loss			yes	GALNT13 NM_052917	0.0%
NAAR071-F2-04C33150	1	2	2q24.1	156,592,000	157,717,000	1,125,000	8	gain			yes		0.3%
NAAR077-H7-05C40979	1	2	2q24.3	165,478,000	166,218,000	740,000	4	gain			yes	RNF2 NM_007212 VNS1 ABP NM_016389 VNS1 ABP NM_006469 C1orf	6.7%
NAAR048-G6-02C09923	2	2	2q31.1	172,258,000	172,303,000	45,000	3	loss					0.0%
NAAR006-A3-8125-201	6	2	2q32.1	184,270,000	186,428,000	2,158,000	11	gain	yes			MOV10L1 NM_018995	0.0%
NAAR006-A4-8125-202	1	2	2q32.1	184,623,000	186,428,000	1,805,000	9	gain	yes		yes	ANKRD15 NM_015158 DMRT1 NM_021951 ANKRD15 NM_153186 DMF	68.9%
NAAR057-F1-HI1281	2	2	2q32.1	185,302,000	186,892,000	1,590,000	8	gain				MOV10L1 NM_018995	0.0%
NAAR062-A2-HI0717	1	3	3p26.3	1,478,480	2,264,800	786,320	6	gain					0.0%
NAAR058-D6-HI1540	6	3	3p14.2	59,347,700	59,711,600	363,900	7	gain			yes	KIAA1944 NM_133448	100.0%
NAAR007-B6-8159-203	1	3	3p14.1	67,773,300	68,967,900	1,194,600	7	loss	yes	yes		MCTP2 NM_018349	0.0%
NAAR077-H11-HI1824	4	3	3p13	70,753,700	71,252,700	499,000	4	gain			yes	SNRPN NM_022806 SNRPN NM_022807 UBE3A NM_130839 OCA2 NM	30.7%
NAAR037-A9-1014-A9-P3	3	3	3p12.2	82,496,200	83,190,200	694,000	6	gain	yes	yes		CDH13 NM_0010257	0.0%
NAAR025-D4-3081.005	1	3	3p12.1	85,618,700	85,619,200	500	3	loss	yes	yes		ANKRD15 NM_153186 DMRT2 NM_181872 DMRT1 NM_021951 DMRT.	68.9%
NAAR078-D11-R-001-017	1	3	3p12.1	85,618,700	85,619,200	500	3	loss			yes	SGC2 NM_139167	52.8%
NAAR049-E2-02C10442	1	3	3q24	149,082,000	149,082,000	0	2	loss					0.0%
NAAR007-F6-8177-202	3	3	3q25.31 3q25.32	157,517,000	159,424,000	1,907,000	10	gain			yes	ANKRD15 NM_153186 DMRT2 NM_181872 DMRT1 NM_021951 DMRT.	68.9%
NAAR064-F12-HI2093	5	3	3q25.31 3q25.32	157,517,000	158,701,000	1,184,000	7	gain			yes		20.6%
NAAR052-F6-HI0682	3	4	4p16.3 4p16.2 4p16.1	398,952	17,044,800	16,645,848	64	loss	yes	yes			0.0%
NAAR062-H3-HI1083	2	4	4p16.3 4p16.2 4p16.1	398,952	6,790,030	6,391,078	12	gain	yes	yes		IRF4 NM_002460 HUS1B NM_148959 DUSP22 NM_020185 EXOC2 NM	32.9%
NAAR071-B8-HI3174	2	4	4p15.33 4p16.1	10,760,900	11,857,300	1,096,400	7	gain			yes		100.0%
NAAR052-F6-HI0682	3	4	4p15.32 4p15.31 4p15.2	18,188,800	23,734,300	5,545,500	20	loss	yes	yes		CDH8 NM_001796	0.0%
NAAR035-C8-1014-C8-P1	1	4	4p15.2	24,846,300	24,846,500	200	2	gain			yes	HTR7 NM_019859 MPHOSPH1 NM_016195 PANK1 NM_138316 HTR7	2.0%
NAAR065-F7-HI2361	3	4	4p15.1	28,022,000	28,870,800	848,800	7	gain					0.0%
NAAR001-A9-8002-202	7	4	4q13.3	71,370,900	71,371,300	400	3	loss					0.0%
NAAR010-F7-8268-201	1	4	4q26	117,347,000	118,226,000	879,000	7	gain	yes		yes		100.0%
NAAR069-F6-HI2662	2	4	4q32.2 4q32.3	164,134,000	167,151,000	3,017,000	15	gain				MMP15 NM_002428 GPR56 NM_005682 GPR56 NM_201525 TEPP NM	0.0%
NAAR046-F3-01C08055	2	4	4q34.3 4q35.1 4q35.2	182,216,000	188,232,000	6,016,000	27	gain				TRPM3 NM_206946 TRPM3 NM_206944 TRPM3 NM_020952 TRPM3 N	0.0%
NAAR031-C8-3213.002	1	4	4q34.3	182,703,000	182,703,000	0	3	gain				MMP15 NM_002428 GPR56 NM_005682 GPR56 NM_201525 TEPP NM	0.0%
NAAR047-F8-01C08500	1	4	4q35.1 4q35.2	185,809,000	189,310,000	3,501,000	17	gain	yes		yes		57.5%
NAAR047-F9-01C08501	1	4	4q35.1 4q35.2	185,809,000	189,310,000	3,501,000	17	gain	yes		yes		72.3%
NAAR062-D6-HI0890	1	4	4q35.2	188,901,000	189,905,000	1,004,000	9	gain	yes				0.0%
NAAR062-D7-HI0891	1	4	4q35.2	188,901,000	189,310,000	409,000	4	loss	yes		yes	OR2T33 NM_001004695 OR2L2 NM_001004686 OR2T33 NM_001005495	79.6%
NAAR007-A6-8156-201	1	4	4q35.2	189,303,000	189,310,000	7,000	3	loss					100.0%
NAAR027-C6-3120.003	1	4	4q35.2	189,303,000	189,310,000	7,000	3	loss	yes				0.0%
NAAR027-D6-3120.004	1	4	4q35.2	189,303,000	189,310,000	7,000	3	loss	yes		yes	TNFRSF8 NM_152942 CLCN6 NM_021737 PRAMEF3 NM_001013692 IF	31.5%
NAAR056-B12-HI0790	1	4	4q35.2	189,303,000	189,310,000	7,000	3	loss				KLK13 NM_015596 KLK10 NM_002776 KLK12 NM_145895 KLK9 NM_0	0.0%
NAAR070-H5-HI3148	1	4	4q35.2	189,303,000	189,310,000	7,000	3	loss	yes				0.0%
NAAR071-A7-HI3161	1	4	4q35.2	189,303,000	189,310,000	7,000	3	loss	yes				0.0%
NAAR023-F9-3046.003	1	4	4q35.2	189,670,000	190,118,000	448,000	7	loss	yes	yes	yes	GJA5 NM_005266 CHD1L NM_004284 BCL9 NM_004326 FMO5 NM_00	33.6%
NAAR073-E12-04C35554	1	4	4q35.2	189,670,000	190,118,000	448,000	7	gain	yes				0.0%
NAAR073-F2-04C35556	1	4	4q35.2	189,670,000	190,200,000	530,000	8	gain	yes				0.0%
NAAR024-A12-3072.008	1	4	4q35.2	189,808,000	191,091,000	1,283,000	12	loss	yes	yes	yes	GJA5 NM_005266 CHD1L NM_004284 BCL9 NM_004326 FMO5 NM_00	33.6%
NAAR041-G7-01C05468	2	4	4q35.2	190,013,000	191,091,000	1,078,000	8	loss	yes	yes	yes		100.0%
NAAR046-F3-01C08055	2	4	4q35.2	190,013,000	191,091,000	1,078,000	8	gain				C18orf58 NM_173817	0.

Sample ID	CNV/sample	Chr	Cytoband	Start	Stop	Size	#SNPs/segment	CNV	Familial	Mendelian error	dGV	RefGene	% overlap
NAAR003-A5-8047-202	4	5	5p15.31\5p15.2\5p1	9,538,490	16,046,000	6,507,510	24	loss					32.0%
NAAR030-E12-3198.003	1	5	5p14.1	29,073,500	29,136,100	62,600	4	loss	yes	yes	yes		11.2%
NAAR030-F12-3198.004	2	5	5p14.1	29,073,500	29,136,100	62,600	4	loss	yes	yes	yes		0.0%
NAAR050-H5-HI2533	2	5	5p14.1	29,073,500	29,136,100	62,600	4	loss	yes	yes	yes		0.0%
NAAR075-F3-04C36242	1	5	5p13.3	31,683,400	31,683,500	100	2	loss			yes		0.2%
NAAR030-C3-3179.006	1	5	5p13.3	33,080,000	33,196,500	116,500	4	gain					0.0%
NAAR053-B12-HI0551	2	5	5p13.1	39,193,600	40,355,600	1,162,000	14	gain				ERO1LB1[NM_019891	0.0%
NAAR003-D6-8056-201	1	5	5p13.1	39,448,600	39,469,900	21,300	2	gain				MOV10L1[NM_018995	0.0%
NAAR031-G8-3214.004	1	5	5q13.3	75,136,400	75,136,700	300	3	loss					0.0%
NAAR046-D1-01C08018	1	5	5q13.3	75,136,400	75,136,700	300	3	loss				C18orf58[NM_173817	0.0%
NAAR077-H11-HI1824	4	5	5q21.2\15q21.1	102,457,000	103,447,000	990,000	5	gain			yes	SNRPN[NM_022806]\SNRPN[NM_022807]\UBE3A[NM_130839]\OCA2[NM_	30.7%
NAAR001-A9-8002-202	7	5	5q21.2	103,669,000	104,188,000	519,000	3	loss			yes		13.4%
NAAR047-E4-01C08484	1	5	5q23.1	117,078,000	119,691,000	2,613,000	17	loss	yes		yes		2.4%
NAAR030-G7-3183.003	5	5	5q23.1\15q23.2	119,510,000	121,563,000	2,053,000	13	gain				VEGFC[NM_005429	0.0%
NAAR029-A9-3171.003	1	5	5q23.2	125,468,000	125,556,000	88,000	5	gain			yes		12.1%
NAAR037-A5-1014-A5-P3	5	5	5q31.1	132,594,000	134,866,000	2,272,000	12	gain			yes	DKFZp434N2030[NM_001009894]\KCNC2[NM_139136]\PPFIA2[NM_0036	5.7%
NAAR064-H4-HI2135	2	5	5q35.2	174,348,000	174,971,000	623,000	7	gain			yes		100.0%
NAAR027-E4-3118.003	1	6	6p25.3	150,610	150,878	268	3	loss				TDRD3[NM_030794	0.0%
NAAR046-C9-01C08014	1	6	6p25.3	150,610	150,878	268	3	gain			yes		100.0%
NAAR049-G4-HI2402	1	6	6p25.3	150,610	150,878	268	3	gain			yes		100.0%
NAAR052-F3-HI0633	2	6	6p25.3\16p25.2\16p25.	374,457	30,443,000	30,068,543	141	loss	yes			CDH8[NM_001796	0.0%
NAAR055-A4-HI0442	2	6	6p25.2\16p25.1\16p24.	3,801,430	18,594,500	14,793,070	67	loss	yes		yes	HDAC11[NM_024827]\FBLN2[NM_001998]\FBLN2[NM_001004019]\NUP2	39.5%
NAAR070-A12-04C29161	1	6	6p24.3	7,456,900	7,595,230	138,330	2	gain				MMP15[NM_002428]\GPR56[NM_005682]\GPR56[NM_201525]\TEPP1[NM_	0.0%
NAAR044-G5-01C06574	1	6	6p22.2	25,282,000	25,382,600	100,600	4	gain			yes	GALNT1[NM_020474]\DTNA3[NM_032980]\DSC3[NM_024423]\DTNA1[NM_1	14.9%
NAAR041-A2-99C00465	4	6	6q14.1	77,520,700	78,789,900	1,269,200	8	gain				COL15A1[NM_001855]\NR4A3[NM_006981]\C9orf21[NM_153698]\CTSL2[0.0%
NAAR066-F1-HI2710	2	6	6q14.1	78,060,300	79,324,200	1,263,900	9	gain			yes	FHOD3[NM_025135	100.0%
NAAR024-E12-3073.004	1	6	6q16.1	94,672,800	95,213,100	540,300	8	loss			yes	PPM2C[NM_018444]\NM_145269]\CDH17[NM_004063]\RBM12B[NM_203	8.3%
NAAR041-A2-99C00465	6	6	6q16.3	104,688,000	105,059,000	371,000	5	gain			yes	CTNNA1[NM_003798]\OR13D1[NM_001004484]\PTPN3[NM_002829]\FC	7.2%
NAAR078-A3-200305415	9	6	6q16.3\16q21	104,688,000	112,813,000	8,125,000	29	gain			yes	HTR1B[NM_000863	34.6%
NAAR078-A3-200305415	9	6	6q21\16q22.1\16q22.2	113,107,000	121,399,000	8,292,000	40	loss	yes				0.0%
NAAR078-A3-200305415	9	6	6q22.3\16q22.32\16q	122,787,000	130,388,000	7,601,000	31	loss	yes		yes	OPRK1[NM_000912	8.4%
NAAR078-A3-200305415	9	6	6q24.1	139,167,000	142,639,000	3,472,000	12	loss				CDH4[NM_001794	0.0%
NAAR078-A3-200305415	9	6	6q24.2\16q24.3	144,964,000	148,225,000	3,261,000	18	loss	yes			PDZK3[NM_015022]\PDZK3[NM_178140	0.0%
NAAR078-A3-200305415	9	6	6q25.2	153,246,000	154,205,000	959,000	8	loss					0.0%
NAAR078-A3-200305415	9	6	6q25.3	156,077,000	158,058,000	1,981,000	12	loss					0.0%
NAAR067-F3-HI1481	4	6	6q25.3	157,739,000	157,941,000	202,000	3	gain				GAB2[NM_012296]\GAB2[NM_080491	0.0%
NAAR052-G9-HI1097	1	6	6q26	163,090,000	163,493,000	403,000	4	gain	yes		yes	PIPE[NM_006112]\CAP1[NM_006367]\RRAGC[NM_022157]\PPIE[NM_20	25.4%
NAAR010-G1-8269-202	2	6	6q27	165,016,000	165,037,000	21,000	3	loss				NOVA1[NM_006489]\NOVA1[NM_002515]\NOVA1[NM_006491	11.4%
NAAR078-A3-200305415	9	6	6q27	165,016,000	167,022,000	2,006,000	13	loss			yes		78.3%
NAAR047-H1-02C09502	8	7	7p21.3\17p21.2\17p21.	11,993,100	17,334,000	5,340,900	20	gain			yes		100.0%
NAAR064-H2-HI2133	1	7	7p21.3	12,577,400	12,826,100	248,700	5	gain			yes		20.6%
NAAR063-F4-HI1524	2	7	7p21.3\17p21.2	49,519,500	50,046,900	527,400	6	gain	yes		yes		20.6%
NAAR064-A4-HI1686	1	7	7q21.11	83,174,700	85,227,400	2,052,700	14	loss	yes	yes	yes	KIAA1559[NM_020917]\MGCG70924[NM_199285]\SYMPK[NM_004819]\ZN	21.1%
NAAR059-G5-HI2100	1	7	7q21.13	87,837,300	89,132,500	1,295,200	6	gain			yes	KCR1[NM_001013620]\CPNE8[NM_153634	90.1%
NAAR061-A5-HI0128	1	7	7q31.32	121,543,000	122,291,000	748,000	4	loss	yes	yes		MMP15[NM_002428]\GPR56[NM_005682]\GPR56[NM_201525]\TEPP1[NM	0.0%
NAAR062-H3-HI1083	2	8	8p23.3\18p23.2\18p23.	1,130,900	6,780,950	5,650,050	32	loss					0.0%
NAAR064-E5-HI1947	1	8	8p23.2	3,909,530	4,949,310	1,039,780	12	gain			yes		6.4%
NAAR067-A8-HI2741	2	8	8p23.2	3,909,530	3,909,710	180	2	gain	yes		yes	C1D[NM_173177]\MEIS1[NM_002398]\PPP3R1[NM_000945]\LOC554251[8.7%
NAAR006-F6-8145-201	2	8	8p23.2	4,473,850	5,900,610	1,426,760	13	gain			yes		86.0%
NAAR007-E6-8175-201	1	8	8p23.1	8,160,870	11,422,100	3,261,230	11	loss		yes	yes	KRTHA7[NM_003770]\FLJ34306[NM_199340]\CD79B[NM_021602]\CASC	18.2%
NAAR041-G2-00C04611	1	8	8p22	13,570,600	14,168,200	597,600	7	gain	yes		yes		48.8%
NAAR050-H10-HI2538	2	8	8q11.21	50,311,400	50,549,200	237,800	2	gain			yes		72.3%
NAAR041-A2-99C00465	4	8	8q11.23	54,253,900	54,663,300	409,400	5	gain			yes	CDC26[NM_139286]\HSDL2[NM_032303]\ASTN2[NM_198187]\WDR31[NM	17.3%
NAAR032-C11-3252.003	1	8	8q13.3	70,795,900	72,139,600	1,343,700	9	gain					0.0%
NAAR073-A12-03C15260	1	8	8q22.1\18q22.2	97,006,400	99,137,500	2,131,100	6	gain					0.0%
NAAR052-F3-HI0633	2	8	8q22.3\18q23.2\18q23.	104,786,000	142,072,000	37,286,000	139	gain				CDH8[NM_001796	0.0%
NAAR070-E3-HI3091	2	8	8q24.12	120,513,000	122,308,000	1,795,000	7	loss					0.0%
NAAR035-G1-1014-G1-P1	1	8	8q24.22	134,743,000	134,743,000	0	2	gain				KRTAP19-4[NM_181610]\KRTAP19-6[NM_181612]\KRTAP19-5[NM_1816	0.0%
NAAR051-G11-02C12334	1	8	8q24.23	137,820,000	137,859,000	39,000	2	loss			yes	GJA5[NM_005266]\CHD1L[NM_004284]\BCL9[NM_004326]\FMO5[NM_00	40.1%
NAAR069-F6-HI2662	2	8	8q24.3	142,072,000	142,072,000	0	2	gain			yes		30.1%
NAAR077-C8-04C37826	1	8	8q24.3	142,072,000	142,072,000	0	2	gain					0.0%
NAAR027-A12-3129.004	1	9	9p24.3	239,391	1,599,250	1,359,859	8	gain				C3orf32[NM_015931]\LOH3CR2A[NM_013343]\CAV3[NM_001234]\CAV3[0.0%
NAAR050-H5-HI2533	2	9	9p24.3	239,391	559,992	320,601	5	gain	yes		yes		0.0%
NAAR064-F6-HI2067	3	9	9p24.3\19p24.2\19p24.	239,391	33,916,500	33,677,109	213	gain	yes		yes		100.0%
NAAR065-B12-HI2269	3	9	9p24.3	239,391	1,599,250	1,359,859	8	gain				CTNNA3[NM_013266]\LRRTM3[NM_178011	0.0%
NAAR041-F10-00C04574	2	9	9p23	11,611,200	12,277,900	666,700	10	loss	yes	yes	yes		100.0%
NAAR065-B12-HI2269	3	9	9p23\19p22.3	11,611,200	14,481,300	2,870,100	31	gain				LOC51334[NM_016644	0.0%
NAAR052-H6-HI1012	1	9	9p23	12,010,900	12,277,900	267,000	6	loss		yes	yes		100.0%
NAARCP2-A1-S-065-003	1	9	9p21.3	23,996,000	23,996,300	300	3	loss				SGCG[NM_000231]\SPATA13[NM_153023]\SACS[NM_014363]\FLJ46358	0.0%
NAAR065-B12-HI2269	3	9	9p21.1	28,114,200	31,349,900	3,235,700	11	gain				LOC51334[NM_016644]\SRFBP1[NM_152546]\FTTM2[NM_177478]\FLJ325	0.0%
NAAR037-A9-1014-A9-P3	3	9	9p13.2	38,017,600	38,288,600	271,000	4	gain			yes	KIAA1815[NM_024896]\UHRF2[NM_152306]\MJD2C[NM_015061]\MLAN	22.3%
NAAR069-H9-04C29142	3	9	9p13.2	38,017,600	38,288,600	271,000	4	gain				MMP15[NM_002428]\GPR56[NM_005682]\GPR56[NM_201525]\TEPP1[NM	0.0%
NAAR064-F6-HI2067	3	9	9q21.1\19q21.12\19q	70,403,200	90,734,300	20,331,100	84	gain				CTNNA3[NM_013266]\LRRTM3[NM_178011	0.0%
NAAR022-H7-3019.003	1	9	9q21.12\19q21.11	70,619,600	70,908,800	289,200	7</						

Sample ID	CNV/sample	Chr	Cytoband	Start	Stop	Size	#SNPs/segment	CNV	Familial	Mendelian error	dGV	RefGene	% overlap
NAAR065-F2-HI0182	1	10	10p13	13,087,500	13,302,400	214,900	4	loss	yes	yes	yes	FHOD3 NM_025135	100.0%
NAAR060-A7-HI2165	1	10	10q11.22 10q11.23	49,217,200	50,638,800	1,421,600	14	gain	yes		yes	DSG4 NM_177986 DSG2 NM_001943 B4GALT6 NM_004775 DSG3 NM	0.2%
NAAR043-H10-01C06237	1	10	10q21.1	59,937,900	59,938,400	500	3	loss	yes			TRPM3 NM_206946 TRPM3 NM_206944 TRPM3 NM_020952 TRPM3 N	0.0%
NAAR057-C7-HI1208	1	10	10q21.3	64,337,400	66,264,700	1,927,300	9	gain					0.0%
NAAR044-H5-01C06591	1	10	10q22.1 10q22.2 10q	67,889,900	133,793,000	65,903,100	258	gain			yes	CDH19 NM_021153 CDH7 NM_033646 SERPINB8 NM_001031848 C18	16.4%
NAAR030-G10-3194.003	1	10	10q21.3	68,424,900	68,552,100	127,200	6	gain	yes				100.0%
NAAR047-H1-02C09502	8	10	10q23.31 10q23.32	92,008,800	93,008,000	999,200	7	gain			yes	SNRPN NM_022806 SNRPN NM_022807 UBE3A NM_130839 OCA2 NM	31.6%
NAAR057-F1-HI1281	2	10	10q23.31 10q23.32	92,008,800	93,008,000	999,200	7	gain			yes	PMP22 NM_153322 FLJ45831 NM_001001684 TEKT3 NM_031898 PMF	100.0%
NAAR077-E7-05C39675	6	10	10q23.31 10q23.32	92,152,400	93,008,000	855,600	5	gain				SHBINM_003028	0.0%
NAAR020-F12-HI1566	3	10	10q25.1	110,441,000	111,091,000	650,000	4	loss			yes	CSMD1 NM_033225	100.0%
NAAR050-H11-HI2539	2	10	10q26.2	127,758,000	127,758,000	0	3	gain			yes	SYNE2 NM_182914 ZFVYE26 NM_015346 SYNE2 NM_182910 SYNE2	0.5%
NAAR074-D9-04C35709	1	11	11p15.2	15,182,800	15,182,900	100	2	loss			yes	GPR65 NM_003608 GALC NM_000153	32.7%
NAAR001-C2-8006-202	1	11	11p15.1	18,048,100	18,048,400	300	2	loss					0.0%
NAAR076-G4-04C37169	1	11	11p14.3	21,709,100	21,709,300	200	3	gain	yes			HABP2 NM_004132	0.0%
NAAR076-G5-04C37170	1	11	11p14.3	21,709,100	21,709,300	200	3	gain	yes		yes	MGC40069 NM_182615	34.4%
NAAR001-A9-8002-202	7	11	11p14.3	22,349,700	22,375,100	25,400	4	loss				SLC17A6 NM_020346	0.0%
NAAR010-E1-8264-201	2	11	11p13	34,393,300	34,576,200	182,900	4	gain				OLFM3 NM_058170	0.0%
NAAR066-A7-HI0151	1	11	11p13	36,163,200	36,163,400	200	3	loss			yes	GABRG3 NM_033223	6.3%
NAAR063-B1-HI1183_2	2	11	11p11.2	48,014,900	48,704,500	689,600	4	gain				SFRS4 NM_005626 PTPRU NM_005704 MECR NM_001024732 EPB41	0.0%
NAAR068-E11-HI2859	2	11	11p11.12	49,879,900	50,595,000	715,100	7	gain	yes		yes	TRAM1 NM_014294 IPRDM14 NM_024504 XKR9 NM_001011720 SLCO	1.1%
NAAR056-C2-HI0799	1	11	11p11.12	50,096,900	50,595,000	498,100	6	gain	yes				0.0%
NAAR068-F2-HI2862	2	11	11p11.12	50,096,900	50,595,000	498,100	6	gain	yes				0.0%
NAAR001-A9-8002-202	7	11	11p11.12	50,418,000	50,595,000	177,000	3	loss			yes		100.0%
NAAR020-F12-HI1566	3	11	11p11.12	50,418,000	50,595,000	177,000	3	loss				SNX14 NM_020468 INT5E NM_002526 SYNCRIP NM_006372 SNX14 N	0.0%
NAAR074-C12-04C35700	1	11	11p11.12	51,247,900	51,319,500	71,600	4	gain					0.0%
NAAR001-F11-8017-202	3	11	11q14.1	77,603,900	77,613,800	9,900	3	loss		yes	yes	PMP22 NM_153322 PMP22 NM_000304 TEKT3 NM_031898 FLJ45831	100.0%
NAAR026-G7-3105.004	1	11	11q22.3	103,005,000	103,045,000	40,000	5	loss		yes		C3orf32 NM_015931 LOH3CR2A NM_013343 CAV3 NM_001234 CAV3 I	0.0%
NAAR063-B3-HI1190	1	11	11q22.3	103,928,000	104,733,000	805,000	8	gain	yes				0.0%
NAAR057-E5-HI1258	1	11	11q23.2 11q23.3 11q	113,502,000	134,403,000	20,901,000	95	gain					0.0%
NAARCP2-A7-S-082-003	1	11	11q25	133,403,000	134,403,000	1,000,000	5	gain			yes		76.9%
NAAR035-E11-1014-E11-P1	1	11	11q25	134,083,000	134,403,000	320,000	4	gain			yes	PSG7 NM_002783 PSG1 NM_006905 PSG6 NM_001031850 PSG6 NM	100.0%
NAAR024-E10-3070.004	1	11	11q25	134,394,000	134,403,000	9,000	3	gain			yes	SHOX2 NM_006884 TIPARP NM_015508 FLJ16641 NM_001004316 SS	8.6%
NAAR060-C5-HI2203	1	12	12q24.12 12p13.33	93,683	130,547,000	130,453,317	476	gain			yes	FLJ16171 NM_001004348 DRD1 NM_000794 SFXN1 NM_022754	15.2%
NAAR047-E5-01C08485	1	12	12p11.23	27,470,200	27,495,700	25,500	3	gain	yes				57.5%
NAAR028-D6-3139.003	1	12	12q11 12q12	36,491,900	37,417,300	925,400	12	gain			yes		24.9%
NAAR001-A9-8002-202	7	12	12q12	36,506,000	37,162,800	656,800	10	loss			yes	KCR1 NM_001013620	100.0%
NAAR004-B12-9080-201	2	12	12q12	36,506,000	36,697,300	191,300	7	loss				KIFC3 NM_005550 MMP15 NM_002428 GPR56 NM_005682 TEPP NM	0.0%
NAAR020-F12-HI1566	3	12	12q12	36,694,800	36,697,300	2,500	3	loss					0.0%
NAAR052-F6-HI0682	3	12	12q24.12 12q13.11	44,378,800	130,547,000	86,168,200	321	gain	yes	yes			0.0%
NAAR033-G1-3258.004	1	12	12q14.1	58,858,000	59,736,400	878,400	4	loss	yes	yes		HRASLS NM_020386 OPA1 NM_130837 OPA1 NM_130831 ATP13A4 N	36.4%
NAAR001-A9-8002-202	7	12	12q21.1	71,222,200	71,727,000	504,800	3	loss			yes	TRHDE NM_013381	60.0%
NAAR028-C3-3133.003	1	12	12q24.33	128,620,000	128,999,000	379,000	4	gain				CAT NM_001752 ELF5 NM_001422 ELF5 NM_198381	0.0%
NAAR041-F10-00C04574	2	13	13q12.12	22,502,100	23,692,300	1,190,200	9	gain	yes		yes	CASP4 NM_033306 COP1 NM_052889 CASP1 NM_033292 CASP1 NM	24.8%
NAAR051-G1-HI2618	1	13	13q12.12	22,502,100	23,692,300	1,190,200	9	gain					0.0%
NAAR047-H1-02C09502	8	13	13q13.1 13q13.2	32,884,200	33,883,200	999,000	6	gain			yes		72.3%
NAAR054-F3-HI0298	1	13	13q14.2	47,048,100	47,569,100	521,000	8	gain	yes				0.0%
NAAR054-F4-HI0299	1	13	13q14.2	47,048,100	47,569,100	521,000	8	gain	yes				0.0%
NAAR031-G7-3212.003	1	13	13q21.31 13q21.32	63,529,600	65,319,400	1,789,800	9	gain	yes		yes		100.0%
NAAR044-C5-01C06331	1	13	13q21.32	65,120,700	65,951,300	830,600	5	gain	yes		yes	C1orf58 NM_173817 KIAA1772 NM_024935 MGC26718 NM_00102999	22.3%
NAAR072-F11-200501053	3	13	13q31.1	80,722,400	82,292,200	1,569,800	9	gain					0.0%
NAAR047-H1-02C09502	8	13	13q31.1	83,604,500	84,667,000	1,062,500	6	gain			yes		100.0%
NAAR072-F11-200501053	3	13	13q33.1 13q33.2	103,629,000	104,277,000	648,000	7	loss			yes	ACOXL NM_018308 BCL2L1 NM_138624 BCL2L1 NM_138621 BCL2L	100.0%
NAAR036-E10-1014-E10-P2	3	14	14q11.2	21,305,700	21,719,200	413,500	9	gain				PACRG NM_152410	0.0%
NAAR038-D6-1015-D6-P1	1	14	14q11.2	21,305,700	21,719,200	413,500	9	gain			yes	C9orf72 NM_018325 C9orf72 NM_145005 C9orf82 NM_024828 ELAVL2	13.8%
NAAR010-E1-8264-201	2	14	14q12	24,835,400	25,548,500	713,100	6	gain				DAB2 NM_001343	0.0%
NAAR063-F7-HI1544	1	14	14q23.2 14q23.3	61,897,100	65,075,600	3,178,500	11	gain			yes	NDUFA11 NM_175614 ZNF441 NM_152355 TICAM1 NM_182919 FLJ39C	9.8%
NAAR063-E9-HI1500	1	14	14q31.1 14q31.2 14q	80,741,900	87,019,000	6,277,100	43	gain			yes	MRPL40 NM_003776 CLTCL1 NM_007098 UFD1L NM_001035247 DGC	20.7%
NAAR002-B3-8026-204	2	15	15q11.2	21,490,300	22,083,700	593,400	9	gain					0.0%
NAAR024-B7-3064.003	1	15	15q11.2 15q12	21,490,300	25,698,400	4,208,100	18	gain	yes		yes	GJA5 NM_005266 CHD1L NM_004284 BCL9 NM_004326 FMO5 NM_00	33.6%
NAAR024-C7-3064.004	1	15	15q11.2 15q12	21,490,300	25,698,400	4,208,100	18	gain	yes		yes	TNKS1 NM_003747 THEX1 NM_153332 XKR6 NM_173683 MFHAS1 NM	9.6%
NAAR039-C9-1021-C9-P3	2	15	15q11.2 15q12	21,490,300	25,698,400	4,208,100	18	gain			yes	ZA20D2 NM_006007 LOC401507 NM_001012278_copy_2 GBA2 NM_02	27.4%
NAAR039-E9-1012-F2-PA	1	15	15q11.2 15q12	21,490,300	25,698,400	4,208,100	18	gain			yes	SLC28A3 NM_022127 HNRPK NM_002140 HNRPK NM_031263 FRMDC	14.5%
NAAR065-E6-HI0302	1	15	15q11.2 15q12	21,490,300	25,698,400	4,208,100	18	gain	yes		yes		20.6%
NAAR065-E7-HI0304	1	15	15q11.2 15q12	21,490,300	25,698,400	4,208,100	18	gain	yes		yes		94.8%
NAAR015-C12-F-016-003	1	15	15q11.2	21,885,600	22,083,700	198,100	6	gain			yes	C1orf11 NM_182581 NOS1AP NM_014697	100.0%
NAAR052-E6-HI0308	1	15	15q12	23,325,300	24,495,700	1,170,400	4	gain			yes	ACOXL NM_018308 BCL2L1 NM_138624 BCL2L1 NM_138621 BCL2L	100.0%
NAAR078-A3-200305415	9	15	15q22.1 15q22.33 15q	49,345,700	100,170,000	50,824,300	190	gain		yes		SGCG NM_000231 SPATA13 NM_153023 SACS NM_014363 FLJ46358	0.0%
NAAR007-C5-8168-202	1	15	15q22.2	57,930,400	58,146,000	215,600	4	gain			yes		100.0%
NAAR055-A4-HI0442	2	15	15q24.2 15q24.3 15q	74,290,400	100,170,000	25,879,600	104	gain			yes		100.0%
NAAR070-E3-HI3091	2	16	16p13.2	7,668,760	8,435,410	766,650	8	loss				APIN NM_017855 C4orf7 NM_152997 CNS3 NM_005212	0.0%
NAAR075-E1-04C36221	2	16	16p13.2	7,668,760	8,435,410	766,650							

Sample ID	CNV/sample	Chr	Cytoband	Start	Stop	Size	#SNPs/segment	CNV	Familial	Mendelian error	dGV	RefGene	% overlap
NAAR017-D4-HI2243	1	16	16q23.3	81,327,500	82,050,200	722,700	5	gain					0.0%
NAAR068-B12-HI1404	2	17	17p12	14,304,400	15,237,700	933,300	10	gain	yes				0.0%
NAAR001-E1-8012-201	1	17	17p12	14,432,900	15,237,700	804,800	9	loss	yes	yes	yes		0.7%
NAAR045-A5-01C06730	3	17	17p12	14,691,500	15,108,700	417,200	4	gain			yes	ACOXL NM_018308 BCL2L1 NM_138624 BCL2L1 NM_138621 BCL2L1	100.0%
NAAR003-A5-8047-202	4	17	17q21.1 17q25.2 17q25.3	33,248,900	76,399,500	43,150,600	88	gain		yes			0.0%
NAAR067-D12-HI2767	2	18	18p11.32	1,564,270	1,964,310	400,040	10	gain	yes		yes		69.2%
NAAR076-D4-04C36611	1	18	18p11.32	1,748,000	1,807,190	59,190	4	loss				SHB NM_003028	0.0%
NAAR022-A10-3023.004	1	18	18p11.21 18p11.22	10,741,600	11,601,400	859,800	7	gain	yes		yes	SUCLG2 NM_003848 FAM19A4 NM_001005527 FAM19A1 NM_213609 FAM19A1	2.1%
NAAR022-H9-3023.003	1	18	18p11.21 18p11.22	10,741,600	11,601,400	859,800	7	gain	yes			FOXB1 NM_012182	0.0%
NAAR001-F11-8017-202	3	18	18p11.21	11,554,300	11,601,400	47,100	3	loss			yes	PMP22 NM_153322 PMP22 NM_000304 TEKT3 NM_031898 FLJ45831 PMP22	100.0%
NAAR036-E10-1014-E10-P2	3	18	18q11.2	18,307,400	18,529,700	222,300	4	gain			yes	CAPZA3 NM_033328 PLCZ1 NM_033123 PIK3C2G NM_004570 AEBP2 GAB2 NM_012296 GAB2 NM_080491	2.5%
NAAR050-H11-HI2539	2	18	18q11.2	18,307,400	18,529,700	222,300	4	gain					0.0%
NAAR058-D6-HI1540	6	18	18q11.2	18,307,400	18,529,700	222,300	4	gain			yes	PMP22 NM_153322 FLJ45831 NM_001001684 TEKT3 NM_031898 PMF KRTAP19-4 NM_181610 KRTAP19-6 NM_181612 KRTAP19-5 NM_181613	100.0%
NAAR036-B11-1014-B11-P2	1	18	18q12.2 18q12.3	34,993,000	35,619,700	626,700	5	loss	yes	yes	yes	KRTAP19-4 NM_181610 KRTAP19-6 NM_181612 KRTAP19-5 NM_181613	0.0%
NAAR020-B4-HI0937	1	19	19q12	32,869,600	33,398,500	528,900	7	gain			yes	ATP5J NM_001003696 CRYZL1 NM_145858 CLDN14 NM_144492 C21C2	10.8%
NAAR071-F1-04C33149	1	19	19q13.11	37,946,700	39,375,900	1,429,200	8	gain			yes		0.3%
NAAR041-G7-01C05468	2	20	20p13	95,685	691,220	595,535	4	gain	yes		yes		100.0%
NAAR041-A2-99C00465	4	20	20q13.33	59,180,200	59,682,100	501,900	5	gain			yes	SLC27A4 NM_005094 C5 NM_001735 CDK9 NM_001261 RAPGEF1 NM_001261	11.0%
NAAR010-H3-8273-202	1	21	21q11.2	13,520,500	13,574,800	54,300	2	gain			yes		100.0%
NAAR017-C2-HI2202	1	21	21q22.11	30,538,900	30,983,100	444,200	8	gain	yes		yes	C2orf10 NM_194250	9.2%
NAAR069-A4-HI2923	1	21	21q22.3	46,751,900	46,782,200	30,300	2	gain			yes		6.8%
NAAR030-C8-3183.007	1	22	22q11.21	17,506,900	19,774,000	2,267,100	4	loss			yes		18.1%
NAAR063-B1-HI1183_2	2	22	22q11.21	17,506,900	20,306,800	2,799,900	5	gain	yes		yes	NDUFA11 NM_175614 ZNF441 NM_152355 TICAM1 NM_182919 FLJ90	10.2%
NAAR074-A11-04C35671	2	22	22q12.1	26,638,100	27,802,400	1,164,300	4	gain					0.0%
NAAR001-G4-8018-201	1	22	22q13.32 22q13.33	47,765,700	48,006,700	241,000	3	loss				GAB2 NM_080491 GAB2 NM_012296	0.0%
NAAR053-F1-03C15328	1	22	22q13.32 22q13.33	48,004,600	48,881,300	876,700	4	loss	yes	yes	yes		19.2%
NAAR072-F11-200501053	3	22	22q13.32 22q13.33	48,004,600	48,881,300	876,700	4	loss	yes	yes	yes		19.2%
NAAR002-B3-8026-204	2	22	22q13.33	48,881,000	48,881,300	300	2	gain			yes		100.0%

Mapping autism risk loci using genetic linkage and chromosomal rearrangements (The Autism Genome Project (AGP) Consortium)

Supplementary Table 3. Breakdown of CNVs in Affected Individuals.

Supplementary Table 6: Breakdown of CNVs in Affected Individuals (NCBI Build 35)

CNVs Overlapping with Autsim Chromosomal Rearrangement Database									
Sample ID	CNV/sample	Chr	Start	Stop	Size	#SNPs/segment	CNV		
NAAR052-F6-HI0682		3	4	398,952	17,044,800	16,645,848	64	loss	
NAAR003-A5-8047-202		4	5	9,538,490	16,046,000	6,507,510	24	loss	
NAAR078-A3-200305415		9	6	104,688,000	112,813,000	8,125,000	29	gain	
NAAR059-G5-HI2100		1	7	87,837,300	89,132,500	1,295,200	6	gain	
NAAR062-H3-HI1083		2	8	1,130,900	6,780,950	5,650,050	32	loss	
NAAR002-B3-8026-204		2	15	21,490,300	22,083,700	593,400	9	gain	
NAAR024-B7-3064.003		1	15	21,490,300	25,698,400	4,208,100	18	gain	
NAAR024-C7-3064.004		1	15	21,490,300	25,698,400	4,208,100	18	gain	
NAAR039-C9-1021-C9-P3		2	15	21,490,300	25,698,400	4,208,100	18	gain	
NAAR039-E9-1012-F2-PA		1	15	21,490,300	25,698,400	4,208,100	18	gain	
NAAR065-E6-HI0302		1	15	21,490,300	25,698,400	4,208,100	18	gain	
NAAR065-E7-HI0304		1	15	21,490,300	25,698,400	4,208,100	18	gain	
NAAR015-C12-F-016-003		1	15	21,885,600	22,083,700	198,100	6	gain	
NAAR052-E6-HI0308		1	15	23,325,300	24,495,700	1,170,400	4	gain	
NAAR078-A3-200305415		9	15	49,345,700	100,170,000	50,824,300	190	gain	
NAAR055-A4-HI0442		2	15	74,290,400	100,170,000	25,879,600	104	gain	
NAAR030-C8-3183.007		1	22	17,506,900	19,774,000	2,267,100	4	loss	
NAAR063-B1-HI1183_2		2	22	17,506,900	20,306,800	2,799,900	5	gain	
Recurrent CNVs									
Sample ID	CNV/sample	Chr	Start	Stop	Size	#SNPs/segment	CNV		
NAAR007-D6-8172-202		1	1	143,780,000	144,894,000	1,114,000	7	gain	
NAAR048-G5-02C09922		1	1	143,780,000	144,894,000	1,114,000	7	gain	
NAAR007-D5-8172-201		1	1	143,780,000	144,894,000	1,114,000	7	gain	
NAAR003-F10-8064-201		1	2	88,993,300	88,993,400	100	2	loss	
NAAR003-A5-8047-202		4	2	88,993,300	88,993,400	100	2	loss	
NAAR025-D4-3081.005		1	3	85,618,700	85,619,200	500	3	loss	
NAAR078-D11-R-001-017		1	3	85,618,700	85,619,200	500	3	loss	
NAAR027-C6-3120.003		1	4	189,303,000	189,310,000	7,000	3	loss	
NAAR071-A7-HI3161		1	4	189,303,000	189,310,000	7,000	3	loss	
NAAR056-B12-HI0790		1	4	189,303,000	189,310,000	7,000	3	loss	
NAAR070-H5-HI3148		1	4	189,303,000	189,310,000	7,000	3	loss	
NAAR007-A6-8156-201		1	4	189,303,000	189,310,000	7,000	3	loss	
NAAR027-D6-3120.004		1	4	189,303,000	189,310,000	7,000	3	loss	
NAAR030-F12-3198.004		2	5	29,073,500	29,136,100	62,600	4	loss	
NAAR050-H5-HI2533		2	5	29,073,500	29,136,100	62,600	4	loss	
NAAR030-E12-3198.003		1	5	29,073,500	29,136,100	62,600	4	loss	
NAAR046-D1-01C08018		1	5	75,136,400	75,136,700	300	3	loss	
NAAR031-G8-3214.004		1	5	75,136,400	75,136,700	300	3	loss	
NAAR069-F6-HI2662		2	8	142,072,000	142,072,000	0	2	gain	
NAAR077-C8-04C37826		1	8	142,072,000	142,072,000	0	2	gain	
NAAR027-A12-3129.004		1	9	239,391	1,599,250	1,359,859	8	gain	
NAAR065-B12-HI2269		3	9	239,391	1,599,250	1,359,859	8	gain	
NAAR069-H9-04C29142		3	9	38,017,600	38,288,600	271,000	4	gain	
NAAR037-A9-1014-A9-P3		3	9	38,017,600	38,288,600	271,000	4	gain	
NAAR057-F1-HI1281		2	10	92,008,800	93,008,000	999,200	7	gain	
NAAR047-H1-02C09502		8	10	92,008,800	93,008,000	999,200	7	gain	
NAAR076-G5-04C37170		1	11	21,709,100	21,709,300	200	3	gain	
NAAR076-G4-04C37169		1	11	21,709,100	21,709,300	200	3	gain	
NAAR056-C2-HI0799		1	11	50,096,900	50,595,000	498,100	6	gain	
NAAR068-F2-HI2862		2	11	50,096,900	50,595,000	498,100	6	gain	
NAAR001-A9-8002-202		7	11	50,418,000	50,595,000	177,000	3	loss	
NAAR020-F12-HI1566		3	11	50,418,000	50,595,000	177,000	3	loss	
NAAR051-G1-HI2618		1	13	22,502,100	23,692,300	1,190,200	9	gain	
NAAR041-F10-00C04574		2	13	22,502,100	23,692,300	1,190,200	9	gain	
NAAR036-E10-1014-E10-P2		3	14	21,305,700	21,719,200	413,500	9	gain	
NAAR038-D6-1015-D6-P1		1	14	21,305,700	21,719,200	413,500	9	gain	
NAAR065-E7-HI0304		1	15	21,490,300	25,698,400	4,208,100	18	gain	
NAAR065-E6-HI0302		1	15	21,490,300	25,698,400	4,208,100	18	gain	
NAAR024-B7-3064.003		1	15	21,490,300	25,698,400	4,208,100	18	gain	
NAAR039-E9-1012-F2-PA		1	15	21,490,300	25,698,400	4,208,100	18	gain	
NAAR024-C7-3064.004		1	15	21,490,300	25,698,400	4,208,100	18	gain	
NAAR039-C9-1021-C9-P3		2	15	21,490,300	25,698,400	4,208,100	18	gain	
NAAR036-E10-1014-E10-P2		3	18	18,307,400	18,529,700	222,300	4	gain	
NAAR050-H11-HI2539		2	18	18,307,400	18,529,700	222,300	4	gain	
NAAR058-D6-HI1540		6	18	18,307,400	18,529,700	222,300	4	gain	
NAAR072-F11-200501053		3	22	48004600	48881300	876700	4	loss	
NAAR053-F1-03C15328		1	22	48004600	48881300	876700	4	loss	

Overlapping CNVs								
Sample ID	CNV/sample	Chr	Start	Stop	Size	#SNPs/segment	CNV	
NAAR074-A7-04C35667		5	1	60,389,500	61,350,000	960,500	6	gain
NAAR074-D1-04C35701		1	1	60,629,100	61,350,000	720,900	5	gain
NAAR025-E10-3090.002		1	1	143,780,000	144,479,000	699,000	6	gain
NAAR006-A3-8125-201		6	1	158,901,000	159,090,000	189,000	6	gain
NAAR069-H9-04C29142		3	1	158,901,000	159,599,000	698,000	7	gain
NAAR043-F6-01C06146		1	2	1,725,230	1,743,780	18,550	3	gain
NAAR043-F7-01C06147		1	2	1,725,230	1,743,780	18,550	3	gain
NAAR006-A3-8125-201		6	2	184,270,000	186,428,000	2,158,000	11	gain
NAAR006-A4-8125-202		1	2	184,623,000	186,428,000	1,805,000	9	gain
NAAR057-F1-HI1281		2	2	185,302,000	186,892,000	1,590,000	8	gain
NAAR007-F6-8177-202		3	3	157,517,000	159,424,000	1,907,000	10	gain
NAAR064-F12-HI2093		5	3	157,517,000	158,701,000	1,184,000	7	gain
NAAR046-F3-01C08055		2	4	182,216,000	188,232,000	6,016,000	27	gain
NAAR031-C8-3213.002		1	4	182,703,000	182,703,000	0	3	gain
NAAR047-F8-01C08500		1	4	185,809,000	189,310,000	3,501,000	17	gain
NAAR047-F9-01C08501		1	4	185,809,000	189,310,000	3,501,000	17	gain
NAAR062-D6-HI0890		1	4	188,901,000	189,905,000	1,004,000	9	gain
NAAR062-D7-HI0891		1	4	188,901,000	189,310,000	409,000	4	loss
NAAR023-F9-3046.003		1	4	189,670,000	190,118,000	448,000	7	loss
NAAR073-E12-04C35554		1	4	189,670,000	190,118,000	448,000	7	gain
NAAR073-F2-04C35556		1	4	189,670,000	190,200,000	530,000	8	gain
NAAR024-A12-3072.008		1	4	189,808,000	191,091,000	1,283,000	12	loss
NAAR041-G7-01C05468		2	4	190,013,000	191,091,000	1,078,000	8	loss
NAAR046-F3-01C08055		2	4	190,013,000	191,091,000	1,078,000	8	gain
NAAR003-D6-8056-201		1	5	39,448,600	39,469,900	21,300	2	gain
NAAR055-A4-HI0442		2	6	3,801,430	18,594,500	14,793,070	67	loss
NAAR041-A2-99C00465		4	6	77,520,700	78,789,900	1,269,200	8	gain
NAAR066-F1-HI2710		2	6	78,060,300	79,324,200	1,263,900	9	gain
NAAR041-A2-99C00465		4	6	104,688,000	105,059,000	371,000	5	gain
NAAR078-A3-200305415		9	6	104,688,000	112,813,000	8,125,000	29	gain
NAAR010-G1-8269-202		2	6	165,016,000	165,037,000	21,000	3	loss
NAAR078-A3-200305415		9	6	165,016,000	167,022,000	2,006,000	13	loss
NAAR064-H2-HI2133		1	7	12,577,400	12,826,100	248,700	5	gain
NAAR064-E5-HI1947		1	8	3,909,530	4,949,310	1,039,780	12	gain
NAAR067-A8-HI2741		2	8	3,909,530	3,909,710	180	2	gain
NAAR006-F6-8145-201		2	8	4,473,850	5,900,610	1,426,760	13	gain
NAAR052-F3-HI0633		2	8	104,786,000	142,072,000	37,286,000	139	gain
NAAR035-G1-1014-G1-P1		1	8	134,743,000	134,743,000	0	2	gain
NAAR050-H5-HI2533		2	9	239,391	559,992	320,601	5	gain
NAAR064-F6-HI2067		3	9	239,391	33,916,500	33,677,109	213	gain
NAAR041-F10-00C04574		2	9	11,611,200	12,277,900	666,700	10	loss
NAAR065-B12-HI2269		3	9	11,611,200	14,481,300	2,870,100	31	gain
NAAR052-H6-HI1012		1	9	12,010,900	12,277,900	267,000	6	loss
NAAR065-B12-HI2269		3	9	28,114,200	31,349,900	3,235,700	11	gain
NAAR046-H2-01C08084		4	9	111,481,000	111,802,000	321,000	6	gain
NAAR030-G10-3194.003		1	10	68,424,900	68,552,100	127,200	6	gain
NAAR077-E7-05C39675		6	10	92,152,400	93,008,000	856,600	5	gain
NAAR050-H11-HI2539		2	10	127,758,000	127,758,000	0	3	gain
NAAR068-E11-HI2859		2	11	49,879,900	50,595,000	715,100	7	gain
NAAR057-E5-HI1258		1	11	113,502,000	134,403,000	20,901,000	95	gain
NAARCP2-A7-S-082-003		1	11	133,403,000	134,403,000	1,000,000	5	gain
NAAR035-E11-1014-E11-P1		1	11	134,083,000	134,403,000	320,000	4	gain
NAAR024-E10-3070.004		1	11	134,394,000	134,403,000	9,000	3	gain
NAAR060-C5-HI2203		1	12	93,683	130,547,000	130,453,317	476	gain
NAAR047-E5-01C08485		1	12	27,470,200	27,495,700	25,500	3	gain
NAAR028-D6-3139.003		1	12	36,491,900	37,417,300	925,400	12	gain
NAAR001-A9-8002-202		7	12	36,506,000	37,162,800	656,800	10	loss
NAAR004-B12-8080-201		2	12	36,506,000	36,697,300	191,300	7	loss
NAAR020-F12-HI1566		3	12	36,694,800	36,697,300	2,500	3	loss
NAAR052-F6-HI0682		3	12	44,378,800	130,547,000	86,168,200	321	gain
NAAR028-C3-3133.003		1	12	128,620,000	128,999,000	379,000	4	gain
NAAR054-F3-HI0298		1	13	47,048,100	47,569,100	521,000	8	gain
NAAR054-F4-HI0299		1	13	47,048,100	47,569,100	521,000	8	gain
NAAR031-G7-3212.003		1	13	63,529,600	65,319,400	1,789,800	9	gain
NAAR044-C5-01C06331		1	13	65,120,700	65,951,300	830,600	5	gain
NAAR002-B3-8026-204		2	15	21,490,300	22,083,700	593,400	9	gain
NAAR015-C12-F-016-003		1	15	21,885,600	22,083,700	198,100	6	gain
NAAR052-E6-HI0308		1	15	23,325,300	24,495,700	1,170,400	4	gain
NAAR078-A3-200305415		9	15	49,345,700	100,170,000	50,824,300	190	gain
NAAR007-C5-8168-202		1	15	57,930,400	58,146,000	215,600	4	gain
NAAR055-A4-HI0442		2	15	74,290,400	100,170,000	25,879,600	104	gain
NAAR075-E1-04C36221		2	16	7,668,760	8,435,410	766,650	8	gain
NAAR029-C8-3169.004		1	16	8,241,130	8,435,410	194,280	5	gain
NAAR045-A5-01C06730		3	16	56,228,100	56,409,200	181,100	6	gain
NAAR026-C4-3099.007		1	16	60,141,700	61,581,600	1,439,900	7	loss
NAAR026-D4-3099.008		1	16	60,141,700	61,581,600	1,439,900	7	loss
NAAR045-A5-01C06730		3	17	14,691,500	15,108,700	417,200	4	gain
NAAR022-A10-3023.004		1	18	10,741,600	11,601,400	859,800	7	gain
NAAR022-H9-3023.003		1	18	10,741,600	11,601,400	859,800	7	gain

De novo CNVs							
Sample ID	CNV/sample	Chr	Start	Stop	Size	#SNPs/segment	CNV
NAAR061-A5-HI0128	1	7	121543000	122291000	748000	4	loss
NAAR054-F3-HI0298	1	13	47048100	47569100	521000	8	gain
NAAR054-F4-HI0299	1	13	47048100	47569100	521000	8	gain
NAAR067-A8-HI2741	1	8	3909530	3909710	180	2	gain
NAAR068-B12-HI1404	1	17	14304400	15237700	933300	10	gain
NAAR022-H7-3019.003	1	9	70619600	70908800	289200	7	loss
NAAR026-C4-3099.007	1	16	60141700	61581600	1439900	7	loss
NAAR026-D4-3099.008	1	16	60141700	61581600	1439900	7	loss
NAAR027-C6-3120.003	1	4	189303000	189310000	7000	3	loss
NAAR027-D6-3120.004	1	4	189303000	189310000	7000	3	loss

Mapping autism risk loci using genetic linkage and chromosomal rearrangements (The Autism Genome Project (AGP) Consortium)

Supplementary Table 4. List of Validated CNVs.

Supplementary Table 7: List of Validated CNVs (NCBI Build 35)

List of Validated CNVs in Batch Analysis

SCAN ID	Family ID	Invd ID	chr	cytoband	start	stop	size	cnv (loss/gain)	Validation
NAAR030-E12-3198.003		3198	3	1 p36.11;p35.3:	24,939,600	30,896,500	5,956,900	gain	Familial
NAAR030-F12-3198.004		3198	4	1 p36.11;p35.3:	25,148,200	30,896,500	5,748,300	gain	Familial
NAAR047-C10-C08464		1116;7101	4,7	1 p35.2	30,265,700	30,896,500	630,800	loss	Familial
NAAR047-C8-01C08462		1116;7101	1,1	1 p35.2	30,265,700	30,896,500	630,800	loss	Familial
NAAR060-G3-H1233		7101;1116	1,1	1 p35.2	30,265,700	30,896,500	630,800	loss	Familial
NAAR074-C3-0C35691		5116	1	1 p32.1;p31.3	60,055,100	61,350,000	1,294,900	gain	Familial
NAAR074-D1-04C35701		5116	4	1 p31.3	60,389,500	61,350,000	960,500	gain	Familial
NAAR036-D12-1014-D12-P2		3178	6	1 p31.1	82,453,300	83,282,300	829,000	gain	Mendelian Error
NAAR024-A12-3072.008		3072	8	1 p21.1	105,739,000	105,801,000	62,000	gain	Familial
NAAR024-G11-3072.006		3072	6	1 p21.1	105,739,000	105,801,000	62,000	gain	Familial
NAAR007-D4-8172-111		8172	11	1 p21.1	143,780,000	144,894,000	1,114,000	gain	Familial
NAAR007-D5-8172-201		8172	20	1 p21.1	143,780,000	144,894,000	1,114,000	gain	Familial
NAAR007-D6-8172-202		8172	20	1 p21.1	143,780,000	144,894,000	1,114,000	gain	Familial
NAAR070-D8-H13079		1425	30	1 p21.1	143,780,000	144,894,000	1,114,000	loss	Mendelian Error
NAAR007-A4-AU2201		8156	10	1 p23.3	158,901,000	159,599,000	698,000	gain	Familial
NAAR007-A8-8156-203		8156	20	1 p23.3	158,901,000	159,599,000	698,000	gain	Familial
NAAR029-E10-3172.009		3172	9	1 p23.3	158,901,000	159,599,000	698,000	gain	Familial
NAAR029-E9-3172.001		3172	1	1 p23.3	158,901,000	159,036,000	135,000	gain	Familial
NAAR029-F9-3172.002		3172	2	1 p23.3	158,901,000	159,036,000	135,000	gain	Familial
NAAR064-H3-H12134		1321	2	1 p23.3	158,901,000	159,599,000	698,000	gain	Familial
NAAR064-H4-H12135		1321	5	1 p23.3	158,901,000	159,036,000	135,000	gain	Familial
NAAR058-E4-H1581		1288	4	1 p31.1	185,134,000	185,838,000	704,000	loss	Mendelian Error
NAAR055-C12-H10556		1168	1	1 p42.3	232,746,000	232,746,000	1,000	loss	Familial
NAAR055-D1-H10557		1168	2	1 p42.3	232,746,000	232,746,000	1,000	loss	Familial
NAAR055-D2-H10560		1168	3	1 p42.3	232,746,000	232,746,000	1,000	loss	Familial
NAAR067-D6-H12761		1410	30	1 p42.3	232,746,000	232,746,000	1,000	loss	Familial
NAAR067-D7-H12762		1410	30	1 p42.3	232,746,000	232,746,000	1,000	loss	Familial
NAAR012-G3-19-961040		4011	1	2 p36.2;p25.3;2j	157,739	240,643,000	240,485,261	gain	Familial, Mendelian Error
NAAR001-A2-8001-111		8001	11	2 p24.3	14,316,000	15,674,900	1,358,900	gain	Familial
NAAR001-A3-8001-202		8001	20	2 p24.3	14,316,000	15,674,900	1,358,900	gain	Familial
NAAR023-B10-3047.004		3047	4	2 p24.2	17,113,300	17,558,400	445,100	loss	Familial
NAAR023-C10-3047.005		3047	5	2 p24.2	17,284,200	17,558,400	274,200	loss	Familial
NAAR032-E1-3222.002		3222	2	2 p24.1	19,980,700	21,966,300	1,985,600	gain	Familial
NAAR032-F1-3222.003		3222	3	2 p24.1	19,980,700	23,634,900	3,654,200	gain	Familial
NAAR032-G1-3222.004		3222	4	2 p24.1	19,980,700	23,634,900	3,654,200	gain	Familial
NAAR049-C11-42C10134		8122;1295	2	2 p16.3	50,430,000	50,785,300	355,300	loss	QPCR, min.sat
NAAR064-C2-H1745		8122;1295	20	2 p12.3	106,922,000	106,922,000	750,000	loss	Mendelian Error
NAAR052-C12-03C13728		2015	2	2 p14.3;q21.1;2j	129,275,000	149,814,000	20,539,000	gain	Familial
NAAR006-A3-8125-201		8125	20	2 p32.1	184,623,000	186,335,000	1,712,000	gain	Familial
NAAR006-A4-8125-202		8125	20	2 p32.1	184,623,000	186,335,000	1,712,000	gain	Familial
NAAR001-D7-8011-111		8011	11	2 p36.1	224,192,000	224,192,000	0	loss	Familial
NAAR001-D9-8011-202		8011	20	2 p36.1	224,192,000	224,192,000	0	loss	Familial
NAAR007-B2-8159-101		8159	10	3 p14.1	67,773,300	68,967,900	1,194,600	loss	Familial
NAAR007-B4-AU32503		8159	20	3 p14.1	67,773,300	68,967,900	1,194,600	loss	Familial, Mendelian Error
NAAR007-B6-8159-203		8159	20	3 p14.1	67,773,300	68,967,900	1,194,600	loss	Familial, Mendelian Error
NAAR030-F9-3192.001		3192	3	3 p12.2	82,496,200	83,190,200	694,000	gain	Familial
NAAR037-A9-1014-A9-P3		3192	4	3 p12.2	82,496,200	83,190,200	694,000	gain	Familial, Mendelian Error
NAAR048-D2-02C10148		9043	4	3 p12.2	82,496,200	82,849,700	353,500	loss	Familial
NAAR049-D1-02C10136		9043	5	3 p12.2	82,849,700	82,849,700	0	loss	Familial
NAAR072-G5-H10615		1023	8	3 p13.31	117,973,000	118,274,000	301,000	loss	Familial
NAAR022-D11-H10615		1023	8	3 p13.31	117,973,000	118,274,000	301,000	loss	Familial
NAAR045-E11-01C07334		7019	5	3 p25.3;q32.6.1	160,960,000	162,570,000	1,610,000	gain	Familial
NAAR045-E8-01C07331		7019	8	3 p25.3;q32.6.1	160,960,000	162,570,000	1,610,000	gain	Familial
NAAR045-E11-01C07334		7019	8	3 p25.3;q32.6.1	160,960,000	162,570,000	1,610,000	gain	Familial
NAAR045-E8-01C07331		7019	8	3 p25.3;q32.6.1	160,960,000	162,570,000	1,610,000	gain	Familial
NAAR045-E11-01C07334		7019	8	3 p25.3;q32.6.1	160,960,000	162,570,000	1,610,000	gain	Familial
NAAR045-E8-01C07331		7019	8	3 p25.3;q32.6.1	160,960,000	162,570,000	1,610,000	gain	Familial
NAAR045-E11-01C07334		7019	8	3 p25.3;q32.6.1	160,960,000	162,570,000	1,610,000	gain	Familial
NAAR045-E8-01C07331		7019	8	3 p25.3;q32.6.1	160,960,000	162,570,000	1,610,000	gain	Familial
NAAR045-E11-01C07334		7019	8	3 p25.3;q32.6.1	160,960,000	162,570,000	1,610,000	gain	Familial
NAAR045-E8-01C07331		7019	8	3 p25.3;q32.6.1	160,960,000	162,570,000	1,610,000	gain	Familial
NAAR045-E11-01C07334		7019	8	3 p25.3;q32.6.1	160,960,000	162,570,000	1,610,000	gain	Familial
NAAR045-E8-01C07331		7019	8	3 p25.3;q32.6.1	160,960,000	162,570,000	1,610,000	gain	Familial
NAAR045-E11-01C07334		7019	8	3 p25.3;q32.6.1	160,960,000	162,570,000	1,610,000	gain	Familial
NAAR045-E8-01C07331		7019	8	3 p25.3;q32.6.1	160,960,000	162,570,000	1,610,000	gain	Familial
NAAR045-E11-01C07334		7019	8	3 p25.3;q32.6.1	160,960,000	162,570,000	1,610,000	gain	Familial
NAAR045-E8-01C07331		7019	8	3 p25.3;q32.6.1	160,960,000	162,570,000	1,610,000	gain	Familial
NAAR045-E11-01C07334		7019	8	3 p25.3;q32.6.1	160,960,000	162,570,000	1,610,000	gain	Familial
NAAR045-E8-01C07331		7019	8	3 p25.3;q32.6.1	160,960,000	162,570,000	1,610,000	gain	Familial
NAAR045-E11-01C07334		7019	8	3 p25.3;q32.6.1	160,960,000	162,570,000	1,610,000	gain	Familial
NAAR045-E8-01C07331		7019	8	3 p25.3;q32.6.1	160,960,000	162,570,000	1,610,000	gain	Familial
NAAR045-E11-01C07334		7019	8	3 p25.3;q32.6.1	160,960,000	162,570,000	1,610,000	gain	Familial
NAAR045-E8-01C07331		7019	8	3 p25.3;q32.6.1	160,960,000	162,570,000	1,610,000	gain	Familial
NAAR045-E11-01C07334		7019	8	3 p25.3;q32.6.1	160,960,000	162,570,000	1,610,000	gain	Familial
NAAR045-E8-01C07331		7019	8	3 p25.3;q32.6.1	160,960,000	162,570,000	1,610,000	gain	Familial
NAAR045-E11-01C07334		7019	8	3 p25.3;q32.6.1	160,960,000	162,570,000	1,610,000	gain	Familial
NAAR045-E8-01C07331		7019	8	3 p25.3;q32.6.1	160,960,000	162,570,000	1,610,000	gain	Familial
NAAR045-E11-01C07334		7019	8	3 p25.3;q32.6.1	160,960,000	162,570,000	1,610,000	gain	Familial
NAAR045-E8-01C07331		7019	8	3 p25.3;q32.6.1	160,960,000	162,570,000	1,610,000	gain	Familial
NAAR045-E11-01C07334		7019	8	3 p25.3;q32.6.1	160,960,000	162,570,000	1,610,000	gain	Familial
NAAR045-E8-01C07331		7019	8	3 p25.3;q32.6.1	160,960,000	162,570,000	1,610,000	gain	Familial
NAAR045-E11-01C07334		7019	8	3 p25.3;q32.6.1	160,960,000	162,570,000	1,610,000	gain	Familial
NAAR045-E8-01C07331		7019	8	3 p25.3;q32.6.1	160,960,000	162,570,000	1,610,000	gain	Familial
NAAR045-E11-01C07334		7019	8	3 p25.3;q32.6.1	160,960,000	162,570,000	1,610,000	gain	Familial
NAAR045-E8-01C07331		7019	8	3 p25.3;q32.6.1	160,960,000	162,570,000	1,610,000	gain	Familial
NAAR045-E11-01C07334		7019	8	3 p25.3;q32.6.1	160,960,000	162,570,000	1,610,000	gain	Familial
NAAR045-E8-01C07331		7019	8	3 p25.3;q32.6.1	160,960,000	162,570,000	1,610,000	gain	Familial
NAAR045-E11-01C07334		7019	8	3 p25.3;q32.6.1	160,960,000	162,570,000	1,610,000	gain	Familial
NAAR045-E8-01C07331		7019	8	3 p25.3;q32.6.1	160,960,000	162,570,000	1,610,000	gain	Familial
NAAR045-E11-01C07334		7019	8	3 p25.3;q32.6.1	160,960,000	162,570,000	1,610,000	gain	Familial
NAAR045-E8-01C07331		7019	8	3 p25.3;q32.6.1	160,960,000	162,570,000	1,610,000	gain	Familial
NAAR045-E11-01C07334		7019	8	3 p25.3;q32.6.1	160,960,000	162,570,000	1,610,000	gain	Familial
NAAR045-E8-01C07331		7019	8	3 p25.3;q32.6.1	160,960,000	162,570,000	1,610,000	gain	Familial
NAAR045-E11-01C07334		7019	8	3 p25.3;q32.6.1	160,960,000	162,570,000	1,610,000	gain	Familial
NAAR045-E8-01C07331		7019	8	3 p25.3;q32.6.1	160,960,000	162,570,000	1,610,000	gain	Familial
NAAR045-E11-01C07334		7019	8	3 p25.3;q32.6.1	160,960,000	162,570,000	1,610,000	gain	Familial
NAAR045-E8-01C07331		7019	8	3 p25.3;q32.6.1	160,960,000	162,570,000	1,610,000	gain	Familial
NAAR045-E11-01C07334		7019	8	3 p25.3;q32.6.1	160,960,000	162,570,000	1,610,000	gain	Familial
NAAR045-E8-01C07331		7019	8	3 p25.3;q32.6.1	160,960,000	162,570,000	1,610,000	gain	Familial
NAAR045-E11-01C07334		7019	8	3 p25.3;q32.6.1	160,960,000	162,570,000	1,610,000	gain	Familial
NAAR045-E8-01C07331		7019	8	3 p25.3;q32.6.1	160,960,000	162,570,000	1,610,000	gain	Familial
NAAR045-E11-01C07334		7019	8	3 p25.3;q32.6.1	160,960,000	162,570,000	1,610,000	gain	Familial
NAAR045-E8-01C07331		7019	8	3 p25.3;q32.6.1	160,960,000	162,570,000	1,610,000		

SCAN ID	Family ID	Invd ID	chr	cytoband	start	stop	size	cnv (loss/gain)	Validation
NAAR010-B5-8254-204		8252	101	13 13q21.2	59,820,300	60,629,400	809,100	gain	Familial
NAAR031-A8-3212.005		3212	5	13 13q21.32	64,798,700	65,319,400	520,700	gain	Familial
NAAR031-G7-3212.003		3212	3	13 13q21.32	64,798,700	65,319,400	520,700	gain	Familial
NAAR025-E6-3085.003		3085	3	14 14q12	24,430,200	26,578,900	2,148,700	gain	Familial
NAAR025-F6-3085.004		3085	4	14 14q12	24,430,200	26,578,900	2,148,700	gain	Familial
NAAR025-G6-3085.005		3085	5	14 14q12	24,430,200	26,578,900	2,148,700	gain	Familial
NAAR025-H6-3085.006		3085	6	14 14q12	24,430,200	26,578,900	2,148,700	gain	Familial
NAAR074-H7-04C35946		5036	2	14 14q12	24,430,200	26,578,900	2,148,700	gain	Familial
NAAR075-E1-04C36221		5025	8	14 14q12	24,430,200	26,578,900	2,148,700	gain	Familial
NAAR076-A1-04C36336		5026	7	14 14q12	24,430,200	26,578,900	2,148,700	gain	Familial
NAAR076-F7-04C37159		5036	4	14 14q12	24,430,200	26,578,900	2,148,700	gain	Familial
NAAR013-H5-20-003619		4042	501	15 15q11.2;15q12.1	21,490,300	28,040,100	6,549,800	gain	Familial
NAAR024-A7-3064.002		3064	2	15 15q11.2;15q12	21,490,300	25,698,400	4,208,100	gain	Familial
NAAR024-B7-3064.003		3064	3	15 15q11.2;15q12	21,490,300	25,698,400	4,208,100	gain	Familial, Affy Nsp 250K
NAAR024-C7-3064.004		3064	4	15 15q11.2;15q12	21,490,300	25,698,400	4,208,100	gain	Familial, Affy Nsp 250K
NAAR039-E9-1012-F2-PA		4042	102	15 15q11.2;15q12.1	21,490,300	25,698,400	4,208,100	gain	Familial
NAAR065-E8-HI0302		1097	3	15 15q11.2;15q12	21,490,300	25,698,400	4,208,100	gain	Familial
NAAR065-E7-HI0304		1097	4	15 15q11.2;15q12	21,490,300	25,698,400	4,208,100	gain	Familial
NAAR078-A3-200305415		4075	100	15 15q22.1;15q22.3	49,345,700	100,170,000	50,824,300	gain	Mendelian Error
NAAR046-G1-01C08070		7073	5	15 15q26.3	99,686,700	100,170,000	483,300	gain	Familial
NAAR046-G2-01C08071		7073	3	15 15q26.3	99,686,700	100,170,000	483,300	gain	Familial
NAAR064-C5-HI1705		1303	4	16 16p12.3	17,241,900	18,006,800	764,900	loss	Familial
NAAR064-C7-HI1861		1303	3	16 16p12.3	17,241,900	18,006,800	764,900	loss	Familial
NAAR026-B4-3099.006		3099	6	16 16q21	60,141,700	61,581,600	1,439,900	loss	Familial
NAAR026-C4-3099.007		3099	7	16 16q21	60,141,700	61,581,600	1,439,900	loss	Familial
NAAR026-D4-3099.008		3099	8	16 16q21	60,141,700	61,581,600	1,439,900	loss	Familial
NAAR045-C7-01C07274		9019	3	16 16q22.3	73,431,000	73,547,600	116,600	loss	Mendelian Error
NAAR002-A4-8025-111		8025	111	16 16q23.1	74,542,400	74,727,000	184,600	gain	Familial
NAAR002-A8-8025-204		8025	204	16 16q23.1	74,542,400	74,727,000	184,600	gain	Familial
NAAR017-D3-HI2242		1294	5	16 16q23.3	81,327,500	82,362,300	1,034,800	gain	Familial
NAAR017-D4-HI2243		1294	6	16 16q23.3	81,327,500	82,362,300	1,034,800	gain	Familial
NAAR001-D12-8012-111		8012	111	17 17p12	14,304,400	15,237,700	933,300	loss	Familial
NAAR019-F3-HI0561		3135;1058	2;1	17 17p12	14,304,400	15,237,700	933,300	loss	Familial
NAAR028-B4-3135.002		1058;3135	1;2	17 17p12	14,304,400	15,237,700	933,300	loss	Familial
NAAR028-C4-3135.003		1058;3135	4;3	17 17p12	14,304,400	15,237,700	933,300	loss	Familial
NAAR028-D4-3135.004		1058;3135	5;4	17 17p12	14,304,400	15,237,700	933,300	loss	Familial
NAAR068-B10-HI1406		1263	3	17 17p12	14,304,400	15,618,600	1,314,200	gain	Familial
NAAR068-B11-HI1405		1263	4	17 17p12	14,304,400	15,618,600	1,314,200	gain	Familial
NAAR068-B12-HI1404		1263	5	17 17p12	14,304,400	15,618,600	1,314,200	gain	Familial
NAAR001-E1-8012-201		8012	201	17 17p12	14,432,900	15,237,700	804,800	loss	Mendelian Error
NAAR068-B9-HI1408		1263	2	17 17p12	14,432,900	15,618,600	1,185,700	gain	Familial
NAAR003-A5-8047-202		8047	202	17 17q21.1;17q25.2	33,248,900	76,399,500	43,150,600	gain	Mendelian Error
NAAR032-H10-3251.004		1238;3251	4;4	17 17q21.31;17q21.2	39,115,900	47,542,500	8,426,600	gain	Familial
NAAR028-F12-3152.002		3152	2	17 17q21.33;17q22	47,396,100	47,542,500	146,400	gain	Familial
NAAR029-B1-3152.004		3152	4	17 17q21.33;17q22	47,396,100	47,542,500	146,400	gain	Familial
NAAR053-A1-HI1319		3251;1238	4;4	17 17q21.33;17q22	47,396,100	47,542,500	146,400	gain	Familial
NAAR060-F1-HI1320		1238;3251	6;2	17 17q21.33;17q22	47,396,100	47,542,500	146,400	gain	Familial, Mendelian Error
NAAR067-D10-HI2765		1384	202	18 18p11.32	1,564,270	1,807,190	242,920	gain	Familial
NAAR067-D12-HI2767		1384	301	18 18p11.32	1,564,270	1,964,310	400,040	gain	Familial
NAAR025-B4-3081.003		3081	3	18 18p11.22	8,513,940	8,514,030	1,000	loss	Familial
NAAR025-D4-3081.005		3081	5	18 18p11.22	8,513,940	8,514,030	1,000	loss	Familial
NAAR022-A10-3023.003		3023	4	18 18p11.22;18p11.1	10,741,600	12,085,900	1,344,300	gain	Familial
NAAR022-G9-3023.002		3023	2	18 18p11.22;18p11.1	10,741,600	11,601,400	859,200	gain	Familial
NAAR030-E12-3198.004		3198	3	19 19q13.13;19p13	3,542,590	57,869,600	54,327,010	gain	Familial
NAAR030-F12-3198.004		3198	4	19 19q13.13;19p13	3,542,590	63,437,700	59,895,110	gain	Familial
NAAR032-E1-3222.002		3222	2	19 19q13.13;19p13	3,542,590	63,437,700	59,895,110	gain	Familial
NAAR032-F1-3222.003		3222	3	19 19q13.13;19p13	3,542,590	63,437,700	59,895,110	gain	Familial
NAAR032-G1-3222.004		3222	4	19 19q13.13;19p13	3,542,590	63,437,700	59,895,110	gain	Familial
NAAR037-C2-1014-C2-P3		3221	4	19 19p13.3;19p13.2	3,542,590	15,912,900	12,370,310	gain	Familial
NAAR037-C3-1014-C3-P3		3221	5	19 19p13.3;19p13.2	3,542,590	15,912,900	12,370,310	gain	Familial
NAAR035-D10-1014-D10-P1		3024	2	19 19p13.12	14,604,000	15,450,300	846,300	gain	Familial
NAAR035-D9-1014-D9-P1		3024	1	19 19p13.12	14,604,000	14,801,000	197,000	gain	Familial
NAAR036-A10-1014-A10-P2		3094	3	19 19q13.12;19q13	42,492,500	63,437,700	20,945,200	gain	Mendelian Error
NAAR037-B4-1014-B4-P3		3201	3	19 19q13.12;19q13	42,492,500	59,489,700	16,997,200	gain	Mendelian Error
NAAR038-F12-1015-F12-P1		5093	3	19 19q13.32;19q13	50,478,900	56,589,300	6,114,400	gain	Mendelian Error
NAAR037-C2-1014-C2-P3		3221	4	19 19q13.11;19q13	56,275,700	63,437,700	7,162,000	gain	Familial
NAAR037-C1-1014-C1-P3		3221	2	19 19q13.11;19q13	56,275,700	63,437,700	6,674,400	gain	Familial
NAAR041-G10-01C05471		7008	2	20 20p13	95,685	1,358,480	1,262,795	gain	Familial
NAAR041-G7-01C05468		7008	4	20 20p13	95,685	691,220	595,535	gain	Familial
NAAR025-E6-3085.003		3085	3	20 20q13.33	59,180,200	61,366,400	2,186,200	gain	Familial
NAAR025-H7-3085.014		3085	14	20 20q13.33	59,180,200	61,366,400	2,186,200	gain	Familial
NAAR030-E7-3183.001		3183	1	20 20q13.33	59,180,200	61,366,400	2,186,200	gain	Familial
NAAR030-F7-3183.002		3183	2	20 20q13.33	59,180,200	61,366,400	2,186,200	gain	Familial
NAAR059-C10-HI1879		4031;1174	500;2	21 21q22.12	36,447,400	36,479,700	32,300	gain	Familial
NAAR059-C7-HI1876		4031;1174	100;4	21 21q22.12	36,447,400	36,479,700	32,300	gain	Familial
NAAR030-E12-3198.003		3198	3	21 21q22.3	42,530,300	46,782,200	4,251,900	gain	Familial
NAAR030-F12-3198.004		3198	4	21 21q22.3	42,530,300	46,782,200	4,251,900	gain	Familial
NAAR032-D2-3224.002		3224	2	21 21q22.3	42,530,300	46,782,200	4,251,900	gain	Familial
NAAR032-D6-3238.003		3238	3	21 21q22.3	42,530,300	46,782,200	4,251,900	gain	Familial
NAAR032-E1-3222.002		3222	2	21 21q22.3	42,530,300	46,782,200	4,251,900	gain	Familial
NAAR032-F1-3222.003		3222	3	21 21q22.3	42,530,300	46,782,200	4,251,900	gain	Familial
NAAR032-G1-3222.004		3222	4	21 21q22.3	42,530,300	46,782,200	4,251,900	gain	Familial
NAAR032-G2-3224.005		3224	5	21 21q22.3	42,530,300	46,782,200	4,251,900	gain	Familial
NAAR019-C8-HI0322		1020	3	22 22q11.1;22q11.1	15,885,600	19,774,000	4,088,400	gain	FISH
NAAR063-B1-HI183.2		1004	4	22 22q11.21	17,506,900	19,774,000	2,267,100	gain	FISH
NAAR037-C2-1014-C2-P3		3221	4	22 22q12.1;22q12.2	25,705,900	32,390,900	6,685,000	gain	Mendelian Error
NAAR029-C10-3172.007		3172	7	22 22q13.33	48,881,000	48,881,300	1,000	gain	Familial
NAAR029-F9-3172.002		3172	2	22 22q13.33	48,881,000	48,881,300	1,000	gain	Familial
NAAR053-F1-03C15328		2072	2	22 22q13.33	48,004,600	48,881,300	876,700	loss	Familial, Affy Nsp 250K
NAAR072-F11-200501053		2072	1	22 22q13.33	48,004,600	48,881,300	876,700	loss	Familial, Affy Nsp 250K

List of Validated CNVs in Plate Analysis

SCAN ID	Family ID	Invd ID	chr	cytoband	start	stop	size	cnv (loss/gain)	Validation
NAAR009-H10-8250-111		1359;8250	201;111	1 1p36.22;1p36.2	10,931,500	15,413,600	4,482,100	gain	Familial, Mendelian Error
NAAR051-F7-HI2612		8250;359	111;201	1 1p36.22;1p36.2	10,931,500	15,413,600	4,482,100	gain	Familial
NAAR037-C2-1014-C2-P3		3221	4	1 1p36.12;1p36.1	23,012,200	34,002,000	10,989,800	gain	Mendelian Error
NAAR047-C10-01C08464		1116;7101	4;7	1 1p35.2	30,265,700	30,817,000	551,300	loss	Familial, Mendelian Error
NAAR047-C8-01C08462		1116;7101	1;1	1 1p35.2	30,265,700	30,817,000	551,300	loss	Familial
NAAR060-G3-HI2323		7101;1116	1;1	1 1p35.2	30,265,700	30,896,500	630,800	loss	Familial
NAAR074-A7-04C35667		5116	5	1 1p31.3	60,389,500	61,350,000	960,500	gain	Familial
NAAR074-C3-04C35691		5116	1	1 1p31.3	60,629,100	61,350,000	720,900	gain	Familial
NAAR074-D1-04C35701		5116	4	1 1p31.3	60,629,100	61,350,000	720,900	gain	Familial, Affy Nsp 250K
NAAR036-D12-1014-D12-P2		3178	6	1 1p31.1	82,453,300	82,511,000	57,700	gain	Mendelian Error
NAAR007-D4-8172-111		8172	111	1 1q21.1	143,780,000	144,894,000	1,114,000		

SCAN ID	Family ID	Invd ID	chr	cytoband	start	stop	size	cnv (loss/gain)	Validation
NAAR032-E1-3222.002		3222	2	2 2p24.1	21,249,500	21,510,300	260,800	gain	Familial
NAAR032-G1-3222.004		3222	4	2 2p24.1	21,249,500	22,833,700	1,584,200	gain	Familial
NAAR049-C8-02C10130			2	2 2p16.3	50,430,000	50,785,300	355,300	loss	QPCR, min.sat
NAAR049-C11-02C10134			2	2 2p16.3	50,430,000	50,785,300	355,300	loss	QPCR, min.sat
NAAR064-C2-H11745	8122;1295		203,3	2 2q12.3	106,922,000	107,678,000	756,000	loss	Mendelian Error
NAAR022-E8-3020.004		3020	4	2 2q13	111,333,000	112,712,000	1,379,000	gain	Familial
NAAR035-D5-1014-D5-P1		3020	1	2 2q13	111,333,000	112,712,000	1,379,000	gain	Familial
NAAR006-A3-8125-201		8125	201	2 2q32.1	184,270,000	186,428,000	2,158,000	gain	Familial
NAAR006-A4-8125-202		8125	202	2 2q32.1	184,270,000	186,428,000	2,158,000	gain	Familial
NAAR062-A10-H10780		1172	2	2 2q34q2q35	211,888,000	217,650,000	5,771,000	gain	Familial
NAAR062-A12-H10782		1172	1	2 2q34q2q35	211,888,000	220,598,000	8,710,000	gain	Familial
NAAR007-B2-8159-101		8159	101	3 3p14.1	67,773,300	68,967,900	1,194,600	loss	Familial
NAAR007-B4-AU32503		8159	201	3 3p14.1	67,773,300	68,967,900	1,194,600	loss	Familial, Mendelian Error
NAAR007-B6-8159-203		8159	203	3 3p14.1	67,773,300	68,967,900	1,194,600	loss	Familial, Mendelian Error
NAAR030-F9-3192.001		3192	1	3 3p12.2	82,496,200	83,190,200	694,000	gain	Familial
NAAR037-A9-1014-A9-P3		3192	1	3 3p12.2	82,496,200	83,190,200	694,000	gain	Familial, Mendelian Error
NAAR025-D4-3081.005		3081	5	3 3p12.1	85,618,700	85,619,200	1,000	loss	Mendelian Error
NAAR072-G5-H10615		1023	8	3 3q13.31	117,973,000	118,274,000	301,000	loss	Familial
NAARCP2-D11-H10615		1023	8	3 3q13.31	117,973,000	118,274,000	301,000	loss	Familial
NAAR052-F6-H10682		1092	4	4 4p16.31q4p16.21q	398,952	17,044,800	16,645,848	loss	Mendelian Error
NAAR062-H3-H11083		1218	3	4 4p16.31q4p16.21q	398,952	6,790,030	6,391,078	gain	Mendelian Error
NAAR052-F6-H10682		1092	4	4 4p15.32q15p15.3	18,198,800	23,734,300	5,545,500	loss	Mendelian Error
NAAR045-G12-POS	3259;3078		1,2	4 4p15.21q4p15.1	27,420,500	28,639,200	1,218,700	gain	Familial
NAAR054-G12-POS	3078;3259		2,1	4 4p15.1	28,022,000	31,238,500	3,216,500	gain	Familial
NAAR055-G12-POS	3078;3259		2,1	4 4p15.1	28,022,000	31,238,500	3,216,500	gain	Familial
NAAR060-G12-POS	3078;3259		2,1	4 4p15.1	28,415,900	28,639,200	223,300	loss	Familial
NAAR033-E1-3257.002		3257	2	4 4q13.3	71,219,300	71,371,300	152,000	loss	Familial
NAAR033-E1-3257.005		3257	5	4 4q13.3	71,219,300	71,371,300	152,000	loss	Familial, Mendelian Error
NAAR010-F6-8268-111		8268	111	4 4q26	116,524,000	118,226,000	1,702,000	gain	Familial
NAAR010-F7-8268-201		8268	201	4 4q26	117,347,000	118,226,000	879,000	gain	Familial
NAAR047-F7-01C08499		7126	1	4 4q35.11q4q35.2	185,809,000	189,310,000	3,501,000	gain	Familial
NAAR047-F8-01C08500		7126	4	4 4q35.11q4q35.2	185,809,000	189,310,000	3,501,000	gain	Familial
NAAR047-F9-01C08501		7126	3	4 4q35.11q4q35.2	185,809,000	189,310,000	3,501,000	gain	Familial
NAAR062-D6-H10889		1088	3	4 4q35.2	188,901,000	189,905,000	1,108,000	gain	Familial
NAAR062-D6-H10889		1088	4	4 4q35.2	188,901,000	189,905,000	1,004,000	gain	Familial
NAAR062-D7-H10891		1088	5	4 4q35.2	188,901,000	189,310,000	409,000	loss	Familial
NAAR027-C6-3120.003		3120	3	4 4q35.2	189,303,000	189,310,000	7,000	loss	Familial
NAAR027-D6-3120.004		3120	4	4 4q35.2	189,303,000	189,310,000	7,000	loss	Familial
NAAR027-E6-3120.005		3120	5	4 4q35.2	189,303,000	189,310,000	7,000	loss	Familial
NAAR070-H5-H13148		1420	302	4 4q35.2	189,303,000	189,310,000	7,000	loss	Familial
NAAR071-A5-H13159		1420	201	4 4q35.2	189,303,000	189,310,000	7,000	loss	Familial
NAAR071-A7-H13161		1420	303	4 4q35.2	189,303,000	189,310,000	7,000	loss	Familial
NAAR023-D9-3046.001		3046	1	4 4q35.2	189,670,000	190,118,000	448,000	loss	Familial
NAAR023-F9-3046.003		3046	3	4 4q35.2	189,670,000	190,118,000	448,000	loss	Familial, Mendelian Error
NAAR062-D4-H10888		1088	2	4 4q35.2	189,670,000	189,905,000	235,000	gain	Familial
NAAR075-E12-04C35554		5035	2	4 4q35.2	189,670,000	190,118,000	448,000	gain	Familial, Affy Nsp 250K
NAAR075-F2-04C35556		5035	3	4 4q35.2	189,670,000	190,200,000	530,000	gain	Familial
NAAR073-H10-04C35587		5035	2	4 4q35.2	189,670,000	190,118,000	448,000	gain	Familial
NAAR024-A12-3072.008		3072	8	4 4q35.2	189,808,000	191,091,000	1,283,000	loss	Familial, Mendelian Error
NAAR024-B12-3072.009		3072	9	4 4q35.2	189,808,000	191,091,000	1,283,000	loss	Familial, Mendelian Error
NAAR024-G11-3072.006		3072	6	4 4q35.2	189,808,000	191,091,000	1,283,000	loss	Familial
NAAR041-G10-01C05471		7008	2	4 4q35.2	190,013,000	191,091,000	1,078,000	loss	Familial
NAAR041-G11-01C05468		7008	4	4 4q35.2	190,013,000	191,091,000	1,078,000	loss	Familial, Mendelian Error
NAAR003-A5-8047-202		8047	202	5 5p15.331q5p15.3	1,677,350	8,438,300	6,760,950	loss	Mendelian Error
NAAR030-D12-3198.002		3198	2	5 5p14.1	29,073,500	29,136,100	62,600	loss	Familial
NAAR030-E12-3198.003		3198	3	5 5p14.1	29,073,500	29,136,100	62,600	loss	Familial, Mendelian Error
NAAR030-F12-3198.004		3198	4	5 5p14.1	29,073,500	29,136,100	62,600	loss	Familial, Mendelian Error
NAAR031-A1-3198.005		3198	5	5 5p14.1	29,073,500	29,136,100	62,600	loss	Familial
NAAR050-H5-H12533		1356	302	5 5p14.1	29,073,500	29,136,100	62,600	loss	Familial, Mendelian Error
NAAR069-C1-H12941		1356	201	5 5p14.1	29,073,500	29,136,100	62,600	loss	Familial
NAAR062-A11-H10781		1172	4	5 5q12.21q5q12.31q	62,596,000	179,796,000	117,200,000	gain	Mendelian Error
NAAR047-C10-01C08464		1116;7101	4,7	5 5q21.3	108,971,000	109,116,000	145,000	gain	Familial
NAAR047-C11-01C08465		7101;1116	10,5	5 5q21.3	108,971,000	109,116,000	145,000	gain	Familial
NAAR047-E4-01C08484		7113	4	5 5q23.1	117,078,000	119,691,000	2,613,000	loss	Mendelian Error
NAAR073-A1-02C09714		2068;2068	3,4	6 6p25.3	150,610	1,478,110	1,327,500	gain	Familial
NAAR073-A3-02C09716		2068	2	6 6p25.3	150,610	1,478,110	1,327,500	gain	Familial
NAAR073-A4-02C09717		2068;2068	3,4	6 6p25.3	150,610	1,478,110	1,327,500	gain	Familial
NAAR052-F3-H10633		1041	3	6 6p25.31q6p25.21q	374,457	30,443,000	30,068,543	loss	Mendelian Error
NAAR055-A4-H10442		1066	4	6 6p25.21q6p25.11q	3,801,430	18,594,500	14,793,070	loss	Mendelian Error
NAAR078-A3-200305415		4075	100	6 6q21.1q6q22.11q6q	113,107,000	121,399,000	8,292,000	loss	Mendelian Error
NAAR078-A3-200305415		4075	100	6 6q22.311q6q22.3.1	122,787,000	130,388,000	7,601,000	loss	Mendelian Error
NAAR078-A3-200305415		4075	100	6 6q24.21q6q24.3.1	144,964,000	148,228,000	3,264,000	loss	Mendelian Error
NAAR052-G9-H11097		1047	4	6 6q26	163,090,000	163,493,000	403,000	gain	Familial
NAAR017-C4-H12209		1047	102	6 6q26	163,493,000	163,493,000	1,000	gain	Familial
NAAR064-A8-H11697		1284	8	6 6q261q6q27	164,166,000	165,792,000	1,626,000	loss	Mendelian Error
NAAR072-C7-H13275		1411	202	7 7q21.311q21.21q	11,819,700	16,715,900	4,896,200	gain	Familial
NAAR072-A5-H13244		1411	302	7 7q21.311q21.21q	12,246,800	17,334,000	5,087,200	gain	Familial
NAAR063-F2-H11522		1226	1	7 7q12.311q12.2	49,519,500	49,519,500	1,219,700	gain	Familial
NAAR063-F4-H11524		1226	6	7 7q12.311q12.2	49,519,500	50,046,900	527,400	gain	Familial
NAAR064-A2-H11684		1245	6	7 7q21.11	83,174,700	84,701,800	1,527,100	loss	Familial
NAAR064-A4-H11686		1245	9	7 7q21.11	83,174,700	85,227,400	2,052,700	loss	Familial, Mendelian Error
NAAR061-A6-H10130		1010	4	7 7q31.32	120,844,000	121,741,000	897,000	loss	Familial
NAAR061-A5-H10128		1010	5	7 7q31.32	121,543,000	122,291,000	748,000	loss	Familial, Mendelian Error
NAAR052-E3-H10085	1065;7103	1261	4,5	7 7q36.1	149,576,500	149,708,000	133,000	loss	Mendelian Error
NAAR063-C5-H11372		1261	5	8 8p23.2	3,909,530	3,910,100	1,000	gain	Familial
NAAR067-A8-H12741		1261	8	8 8p23.2	3,909,530	3,909,710	1,000	gain	Familial
NAAR054-C1-H10191	7052;1017		3,3	8 8p23.2	4,473,850	4,949,310	475,460	gain	Familial
NAAR054-B12-H10189	1017;7052		2,1	8 8p23.2	4,881,960	4,949,310	67,350	gain	Familial
NAAR007-E6-8175-201		8175	201	8 8p23.1	8,160,870	11,422,100	3,261,230	loss	Mendelian Error
NAAR041-F5-00C03537		2029	2	8 8p22	13,570,600	14,168,200	597,600	gain	Familial
NAAR041-G2-00C04611		2029	3	8 8p22	13,570,600	14,168,200	597,600	gain	Familial
NAAR050-H5-H12533		1356	302	9 9p24.3	239,391	559,992	320,601	gain	Familial
NAAR064-F6-H12067		1305	3	9 9p24.31q9p24.21q	239,391	33,916,500	33,677,109	gain	Familial
NAAR064-F8-H12081		1305	2	9 9p24.3	239,391	1,599,250	1,359,859	gain	Familial
NAAR069-C1-H12941		1356	201	9 9p24.3	239,391	559,992	320,601	gain	Familial
NAAR074-A9-04C35688		5134	2	9 9p24.3	239,391	1,599,250	1,359,859	gain	Familial
NAAR074-G7-04C35931		5134	4	9 9p24.3	239,391	1,599,250	1,359,859	gain	Familial
NAAR041-F10-00C04574		9032	4	9 9p23	11,611,200	12,277,900	666,700	loss	Familial, Mendelian Error
NAAR041-F12-00C04583		9032	2	9 9p23	11,611,200	12,277,900	666,700	loss	Familial
NAAR002-G12-8045-101		1008;8045	1,101	9 9p23	12,010,900	12,277,900	267,000	loss	Familial
NAAR052-H6-H11012		1183	3	9 9p23	12,010,900	12,277,900	267,000	loss	Mendelian Error
NAAR071-H9-H11766	1008;8045		1,101	9 9p23	12,010,900	12,277,900	267,000	loss	Familial
NAAR017-E6-H12334		1302	3	9 9p13.31q9p13.21q	34,733,600	80,821,100	46,087,500	gain	Mendelian Error
NAAR022-A8-3019.004		3019	4	9 9q21.121q21.1.1	70,619,600	70,908,800	289,200	loss	Familial, Mendelian Error
NAAR022-H7-3019.003		3019	3	9 9q21.121q21.1.1	70,619,600	70,908,800	28		

SCAN ID	Family ID	Invd ID	chr	cytband	start	stop	size	cnv (loss/gain)	Validation
NAAR035-C11-1014-C11-P1		3011	8	11 11p11.12	50,096,900	50,595,000	498,100	gain	Familial
NAAR056-C2-H0789		1203	4	11 11p11.12	50,096,900	50,595,000	498,100	gain	Familial
NAAR056-C4-H0801		1203	2	11 11p11.12	50,096,900	50,595,000	498,100	gain	Familial
NAAR068-F2-HI2862		1440	302	11 11p11.12	50,096,900	50,595,000	498,100	gain	Familial
NAAR022-B3-3011.002		3011	2	11 11p11.12	50,123,600	50,595,000	471,400	gain	Familial
NAAR074-C12-04C35700		5081	4	11 11p11.12	51,247,900	51,319,500	71,600	gain	Affy Nsp 250K
NAAR001-F11-8017-202		8017	202	11 11q14.1	77,603,900	77,613,800	9,900	loss	Mendelian Error
NAAR026-G7-3105.004		3105	4	11 11q22.3	103,005,000	103,045,000	40,000	gain	Mendelian Error
NAAR020-DE-H11175		1117	2	11 11q22.3	103,928,000	104,733,000	805,000	gain	Familial
NAAR063-B2-HI1189		1117	3	11 11q22.3	103,928,000	104,849,000	921,000	gain	Familial
NAAR063-B3-HI1190		1117	5	11 11q22.3	103,928,000	104,733,000	805,000	gain	Familial
NAAR043-D12-01C06058	2003,2003,7057,7057,1386,1386	1092	4,5;3,4;302;303	11 11q25	131,716,000	131,787,000	71,000	gain	Familial
NAAR052-B12-02C13222	2003,2003,7057,7057,1386,1386	1092	4,5;3,4;302;303	11 11q25	131,716,000	131,787,000	71,000	gain	Familial
NAAR066-D1-HI2798	7057,1386	5301	11 11q25	131,716,000	131,751,000	35,000	gain	Familial	
NAAR047-E2-01C08492		7113	1	12 12p11.23	27,470,200	27,495,700	25,500	gain	Familial
NAAR047-E5-01C08485		7113	3	12 12p11.23	27,470,200	27,495,700	25,500	gain	Familial
NAAR033-A8-3271.005		3271	5	12 12q12	36,506,000	36,727,000	221,000	loss	Familial
NAAR033-E7-3271.001		3271	1	12 12q12	36,506,000	36,727,000	221,000	loss	Familial
NAAR052-F6-HI0682		1092	4	12 12q24.12/11q21q13	44,378,800	130,547,000	86,168,200	gain	Familial, Mendelian Error
NAAR033-F1-3258.001		3258	1	12 12q14.1	58,858,000	59,736,400	878,400	loss	Familial
NAAR033-G1-3258.004		3258	4	12 12q14.1	58,858,000	59,736,400	878,400	loss	Familial, Mendelian Error
NAAR055-G1-HI0683		1092	1	12 12q23.1/11q2q23.1	97,294,200	100,120,000	2,915,800	gain	Familial
NAAR041-F10-00C04574		9032	4	13 13q12.12	22,502,100	23,692,300	1,190,200	gain	Familial
NAAR041-F9-00C04573		9032	1	13 13q12.12	22,502,100	23,692,300	1,190,200	gain	Familial
NAAR054-F3-HI0298		1154	3	13 13q14.2	47,048,100	47,569,100	521,000	gain	Familial
NAAR054-F4-HI0299		1154	4	13 13q14.2	47,048,100	47,569,100	521,000	gain	Familial
NAAR031-G7-3212.003		3212	3	13 13q21.31/11q13q21	63,529,600	65,319,400	1,789,800	gain	Familial
NAAR031-A8-3212.005		3212	5	13 13q21.32	64,798,700	65,319,400	520,700	gain	Familial
NAAR044-C3-01C06329		7084	2	13 13q21.32	65,120,700	65,951,300	830,600	gain	Familial
NAAR044-C5-01C06331		7084	4	13 13q21.32	65,120,700	65,951,300	830,600	gain	Familial
NAAR045-G12-POS	3259,3078	1,2	13 13q31.1	83,604,500	85,823,600	2,219,100	gain	Familial	
NAAR055-G12-POS	3078,3259	2,1	13 13q31.1	83,604,500	85,823,600	2,219,100	gain	Familial	
NAAR060-G12-POS	3078,3259	2,1	13 13q31.1	83,604,500	85,823,600	2,219,100	gain	Familial	
NAAR029-F1-3156.002		3156	2	14 14q12	24,430,200	26,578,900	2,148,700	gain	Familial
NAAR029-G1-3156.003		3156	3	14 14q12	24,430,200	26,578,900	2,148,700	gain	Familial
NAAR048-H1-02C09931	1276,2036	3,3	14 14q12	24,430,200	26,578,900	2,148,700	gain	Familial	
NAAR060-G12-POS	3078,3259	2,1	14 14q12	24,430,200	26,578,900	2,148,700	gain	Familial	
NAAR072-A5-HI3244	1411	302	14 14q12	24,430,200	26,578,900	2,148,700	gain	Familial	
NAAR072-A6-HI3245	1411	303	14 14q12	24,430,200	26,578,900	2,148,700	gain	Familial	
NAAR073-G11-04C35577	5036	6	14 14q12	24,430,200	26,578,900	2,148,700	gain	Familial	
NAAR076-F7-04C37159	6036	3	14 14q12	24,430,200	26,578,900	2,148,700	gain	Familial	
NAAR029-E1-3156.001	3156	1	14 14q12	24,835,400	26,578,900	1,743,500	gain	Familial	
NAAR030-G12-POS	3078,3259	2,1	14 14q12	24,835,400	26,578,900	1,743,500	gain	Familial	
NAAR052-DE-03C13914	1276,2036	1,1	14 14q12	24,835,400	26,578,900	1,743,500	gain	Familial	
NAAR024-B7-3064.003	3064	3	15 15q11.2/11q15q12	21,490,300	25,698,400	4,208,100	gain	Familial, Affy Nsp 250K	
NAAR024-C7-3064.004	3064	4	15 15q11.2/11q15q12	21,490,300	25,698,400	4,208,100	gain	Familial, Affy Nsp 250K	
NAAR065-EG-HI0302	1097	3	15 15q11.2/11q15q12	21,490,300	25,698,400	4,208,100	gain	Familial, FISH, MLPA	
NAAR065-E7-HI0304	1097	4	15 15q11.2/11q15q12	21,490,300	25,698,400	4,208,100	gain	Familial, FISH, MLPA	
NAAR024-A7-3064.002	3064	2	15 15q11.2/11q15q12	21,885,600	25,698,400	3,812,800	gain	Familial	
NAAR046-F11-01C08067	7070,8044	6,201	15 15q11.2	21,885,600	22,083,700	198,100	loss	Mendelian Error	
NAAR078-A3-200305415	4075	100	15 15q22.1/11q15q22.1	49,345,700	100,170,000	50,824,300	gain	Mendelian Error	
NAAR029-C8-3169.004	3169	4	16 16p13.2	8,241,130	8,435,410	194,280	gain	Familial	
NAAR036-DE-1014-DE-P2	3169	3	16 16p13.2	8,241,130	8,435,410	194,280	gain	Familial	
NAAR026-B4-3099.006	3099	6	16 16q21	60,141,700	61,581,600	1,439,900	loss	Familial, Mendelian Error	
NAAR026-C4-3099.007	3099	7	16 16q21	60,141,700	61,581,600	1,439,900	loss	Familial, Mendelian Error	
NAAR026-D4-3099.008	3099	8	16 16q21	60,141,700	61,581,600	1,439,900	loss	Familial, Mendelian Error	
NAAR001-D12-8012-111	8012	111	17 17p12	14,304,400	15,237,700	933,300	loss	Familial	
NAAR028-B4-3135.002	1058,3135	1,2	17 17p12	14,304,400	15,237,700	933,300	loss	Familial	
NAAR028-C4-3135.003	1058,3135	4,3	17 17p12	14,304,400	15,237,700	933,300	loss	Familial, Mendelian Error	
NAAR028-D4-3135.004	3135,1058	4,5	17 17p12	14,304,400	15,237,700	933,300	loss	Familial, Mendelian Error	
NAAR068-B11-HI1405	1263	4	17 17p12	14,304,400	15,237,700	933,300	gain	Familial	
NAAR068-B12-HI1404	1263	5	17 17p12	14,304,400	15,237,700	933,300	gain	Familial	
NAAR001-E1-8012-201	8012	201	17 17p12	14,432,900	15,237,700	804,800	loss	Familial, Mendelian Error	
NAAR003-A5-8047-202	8047	202	17 17q21.1/11q17q25.1	33,248,900	76,399,500	43,150,600	gain	Mendelian Error	
NAAR067-D10-HI2765	1384	202	18 18p11.32	1,564,270	1,807,190	242,920	gain	Familial	
NAAR067-D12-HI2767	1384	301	18 18p11.32	1,564,270	1,964,310	400,040	gain	Familial	
NAAR076-D4-04C36611	5106	3	18 18p11.32	1,748,000	1,807,190	59,190	loss	Affy Nsp 250K	
NAAR022-A10-3023.004	3023	4	18 18p11.21/11q18p11	10,741,600	11,601,400	859,800	gain	Familial	
NAAR022-G9-3023.002	3023	2	18 18p11.21/11q18p11	10,741,600	11,601,400	859,800	gain	Familial	
NAAR022-H9-3023.003	3023	3	18 18p11.21/11q18p11	10,741,600	11,601,400	859,800	gain	Familial	
NAAR031-A8-3212.005	3212	5	18 18q12.2	32,374,000	32,510,700	136,700	loss	Familial, Mendelian Error	
NAAR031-E7-3212.001	3212	1	18 18q12.2	32,374,000	32,510,700	136,700	loss	Familial	
NAAR027-G6-3121.002	3121	2	18 18q12.2/11q18q12.1	34,993,000	35,619,700	626,700	loss	Familial	
NAAR036-B11-1014-B1-P2	3121	4	18 18q12.2/11q18q12.1	34,993,000	35,619,700	626,700	loss	Familial, Mendelian Error	
NAAR030-C12-3198.001	3198	1	19 19p13.3/11q19p13.1	3,542,590	15,912,900	12,370,310	gain	Familial	
NAAR030-D12-3198.002	3198	2	19 19p13.3/11q19p13.1	3,542,590	16,332,900	12,790,310	gain	Familial	
NAAR037-C2-1014-C2-P3	3221	4	19 19q13.41/11q19q13	56,275,700	63,437,700	7,162,000	gain	Familial	
NAAR037-C1-1014-C1-P3	3221	19	19q13.41/11q19q13	56,763,300	63,437,700	6,674,400	gain	Familial	
NAAR041-G10-01C05471	7008	2	20 20p13	95,685	1,358,480	1,262,795	gain	Familial	
NAAR041-G7-01C05468	7008	4	20 20p13	95,685	691,220	595,535	gain	Familial	
NAAR017-C1-HI2201	1318	2	21 21q22.11	30,538,900	30,983,100	444,200	gain	Familial	
NAAR017-C2-HI2202	1318	3	21 21q22.11	30,538,900	30,983,100	444,200	gain	Familial	
NAAR063-B1-HI1183_2	1004	4	22 22q11.21	17,508,900	20,306,800	2,797,900	gain	Familial, FISH	
NAAR063-A10-HI1180	1004	2	22 22q11.21	18,008,700	19,774,000	1,765,300	gain	Familial, FISH	
NAAR053-F1-03C15328	2072	2	22 22q13.33	48,004,600	48,881,300	876,700	loss	Familial, Affy Nsp 250K	
NAAR072-F11-200501053	2072	1	22 22q13.33	48,004,600	48,881,300	876,700	loss	Familial, Affy Nsp 250K	

List of Validated CNVs in Filtered Analysis

SCAN ID	Family ID	Invd ID	chr	cytband	start	stop	size	cnv (loss/gain)	Validation
NAAR008-H10-8250-111	135918250		201111	1 1p36.22/11p36.2	10,931,500	15,413,600	4,482,100	gain	Familial
NAAR051-F7-HI2612	825011350		1111201	1 1p36.22/11p36.2	10,931,500	15,413,600	4,482,100	gain	Familial
NAAR047-C10-01C08464	111617101		4/17	1 1p35.2	30,265,700	30,817,000	551,300	loss	Familial, Mendelian Error
NAAR047-C8-01C08462	111617101		1/11	1 1p35.2	30,265,700	30,817,000	551,300	loss	Familial
NAAR060-G3-HI2323	710111116		1/11	1 1p35.2	30,265,700	30,896,500	630,800	loss	Familial
NAAR074-A7-04C35667	5116		5	1 1p31.3	60,389,500	61,350,000	960,500	gain	Familial
NAAR074-C3-04C35691	5116		1	1 1p31.3	60,629,100	61,350,000	720,900	gain	Familial
NAAR074-D1-04C35701									

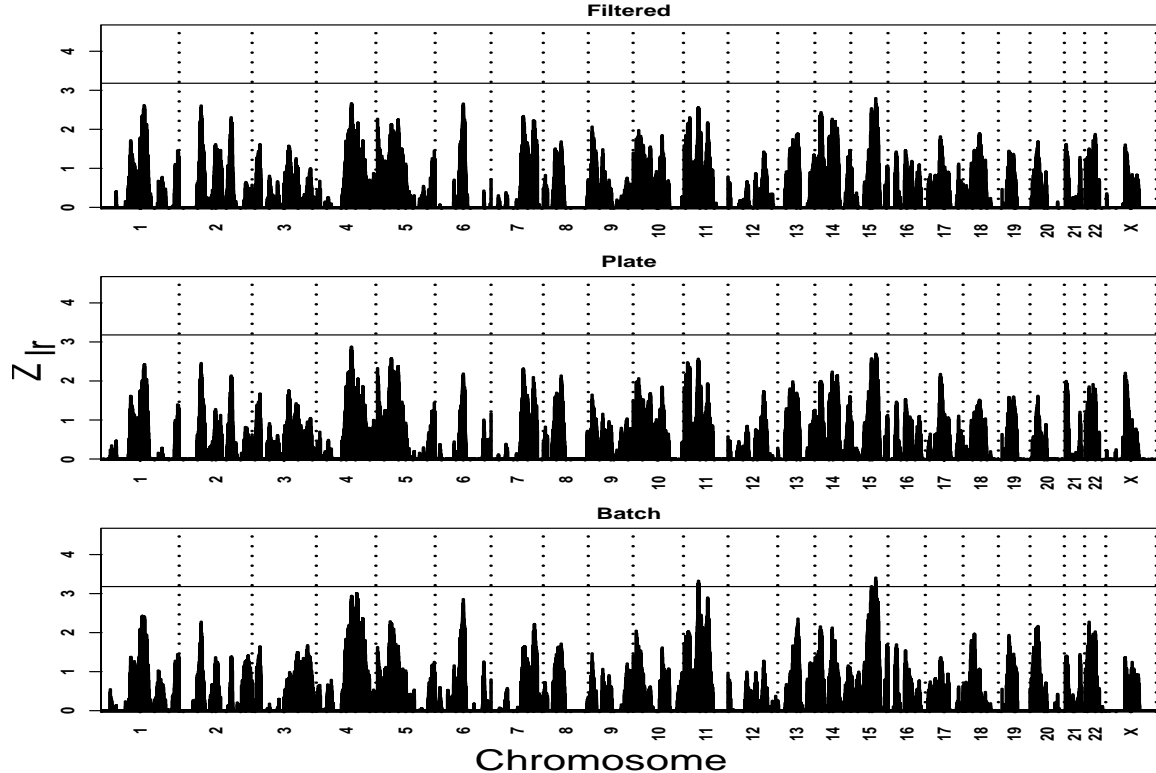
SCAN ID	Family ID	Invd ID	chr	cytoband	start	stop	size	cnv (loss/gain)	Validation
NAAR054-F4-H10299		1154	4	13 13q14.2	47,048,100	47,569,100	521,000	gain	Familial
NAAR031-G7-3212.003		3212	3	13 13q21.31t113q21	63,529,600	65,319,400	1,789,800	gain	Familial
NAAR031-A8-3212.005		3212	5	13 13q21.32	64,798,700	65,319,400	520,700	gain	Familial
NAAR044-C3-01C06329		7084	2	13 13q21.32	65,120,700	65,951,300	830,600	gain	Familial
NAAR044-C5-01C06331		7084	4	13 13q21.32	65,120,700	65,951,300	830,600	gain	Familial
NAAR024-B7-3064.003		3064	3	15 15q11.2t115q12	21,490,300	25,698,400	4,208,100	gain	Familial, Affy Nsp 250K
NAAR024-C7-3064.004		3064	4	15 15q11.2t115q12	21,490,300	25,698,400	4,208,100	gain	Familial, Affy Nsp 250K
NAAR065-E6-H10302		1097	3	15 15q11.2t115q12	21,490,300	25,698,400	4,208,100	gain	Familial, FISH, MLPA
NAAR065-E7-H10304		1097	4	15 15q11.2t115q12	21,490,300	25,698,400	4,208,100	gain	Familial, FISH, MLPA
NAAR024-A7-3064.002		3064	2	15 15q11.2t115q12	21,885,600	25,698,400	3,812,800	gain	Familial
NAAR046-F11-01C08067	70708044		6t201	15 15q11.2	21,885,600	22,083,700	198,100	loss	Familial, Mendelian Error
NAAR078-A3-200305415		4075	100	15 15q22.1t15q22.1	49,345,700	100,170,000	50,824,300	gain	Familial, Mendelian Error
NAAR029-C8-3169.004		3169	4	16 16p13.2	8,241,130	8,435,410	194,280	gain	Familial
NAAR026-B4-3099.006		3099	6	16 16q21	60,141,700	61,581,600	1,439,900	loss	Familial, Mendelian Error
NAAR026-C4-3099.007		3099	7	16 16q21	60,141,700	61,581,600	1,439,900	loss	Familial, Mendelian Error
NAAR026-D4-3099.008		3099	8	16 16q21	60,141,700	61,581,600	1,439,900	loss	Familial, Mendelian Error
NAAR001-D12-8012-111		8012	111	17 17p12	14,304,400	15,237,700	933,300	loss	Familial
NAAR028-B4-3135.002	1058t3135		1t2	17 17p12	14,304,400	15,237,700	933,300	loss	Familial
NAAR028-C4-3135.003	1058t3135		4t3	17 17p12	14,304,400	15,237,700	933,300	loss	Familial, Mendelian Error
NAAR028-D4-3135.004	3135t1058		4t5	17 17p12	14,304,400	15,237,700	933,300	loss	Familial, Mendelian Error
NAAR068-B11-H11405		1263	4	17 17p12	14,304,400	15,237,700	933,300	gain	Familial
NAAR068-B12-H11404		1263	5	17 17p12	14,304,400	15,237,700	933,300	gain	Familial
NAAR001-E1-8012-201		8012	201	17 17p12	14,432,900	15,237,700	804,800	loss	Familial, Mendelian Error
NAAR003-A5-8047-202		8047	202	17 17q21.1t17q25.1	33,248,900	76,399,500	43,150,600	gain	Familial
NAAR076-D4-04C36611		5106	3	18 18p11.32	1,748,000	1,807,190	59,190	loss	Affy Nsp 250K
NAAR067-D10-H12765		1384	202	18 18p11.32	1,564,270	1,807,190	242,920	gain	Familial
NAAR067-D12-H12767		1384	301	18 18p11.32	1,564,270	1,964,310	400,040	gain	Familial
NAAR022-A10-3023.004		3023	4	18 18p11.2t118p11	10,741,600	11,601,400	859,800	gain	Familial
NAAR022-G9-3023.002		3023	2	18 18p11.2t118p11	10,741,600	11,601,400	859,800	gain	Familial
NAAR022-H9-3023.003		3023	3	18 18p11.2t118p11	10,741,600	11,601,400	859,800	gain	Familial
NAAR031-A8-3212.005		3212	5	18 18q12.2	32,374,000	32,510,700	136,700	loss	Familial, Mendelian Error
NAAR031-E7-3212.001		3212	1	18 18q12.2	32,374,000	32,510,700	136,700	loss	Familial
NAAR027-G6-3121.002		3121	2	18 18q12.2t118q12.1	34,993,000	35,619,700	626,700	loss	Familial
NAAR036-B11-1014-B11-P2		3121	4	18 18q12.2t118q12.1	34,993,000	35,619,700	626,700	loss	Familial, Mendelian Error
NAAR030-C12-3198.001		3198	1	19 19p13.3t19p13.1	3,542,590	15,912,900	12,370,310	gain	Familial
NAAR030-D12-3198.002		3198	2	19 19p13.3t19p13.1	3,542,590	16,332,900	12,790,310	gain	Familial
NAAR041-G10-01C05471		7008	2	20 20p13	95,685	1,358,480	1,262,795	gain	Familial
NAAR041-G7-01C05468		7008	4	20 20p13	95,685	691,220	595,535	gain	Familial
NAAR017-C1-H12201		1318	2	21 21q22.11	30,538,900	30,983,100	444,200	gain	Familial
NAAR017-C2-H12202		1318	3	21 21q22.11	30,538,900	30,983,100	444,200	gain	Familial
NAAR063-B1-H11183_2		1004	4	22 22q11.21	17,506,900	20,306,800	2,799,900	gain	Familial, FISH
NAAR063-A10-H11180		1004	2	22 22q11.21	18,008,700	19,774,000	1,765,300	gain	Familial, FISH
NAAR053-F1-03C15328		2072	2	22 22q13.33	48,004,600	48,881,300	876,700	loss	Familial, Mendelian Error, Affy Nsp 250K
NAAR072-F11-200501053		2072	1	22 22q13.33	48,004,600	48,881,300	876,700	loss	Familial, Affy Nsp 250K

Mapping autism risk loci using genetic linkage and chromosomal rearrangements (The Autism Genome Project (AGP) Consortium)

Supplementary Figure 1. Binned size distribution of CNVs in batch (A), plate (B) and filtered (C) analyses.

Mapping autism risk loci using genetic linkage and chromosomal rearrangements (The Autism Genome Project (AGP) Consortium)

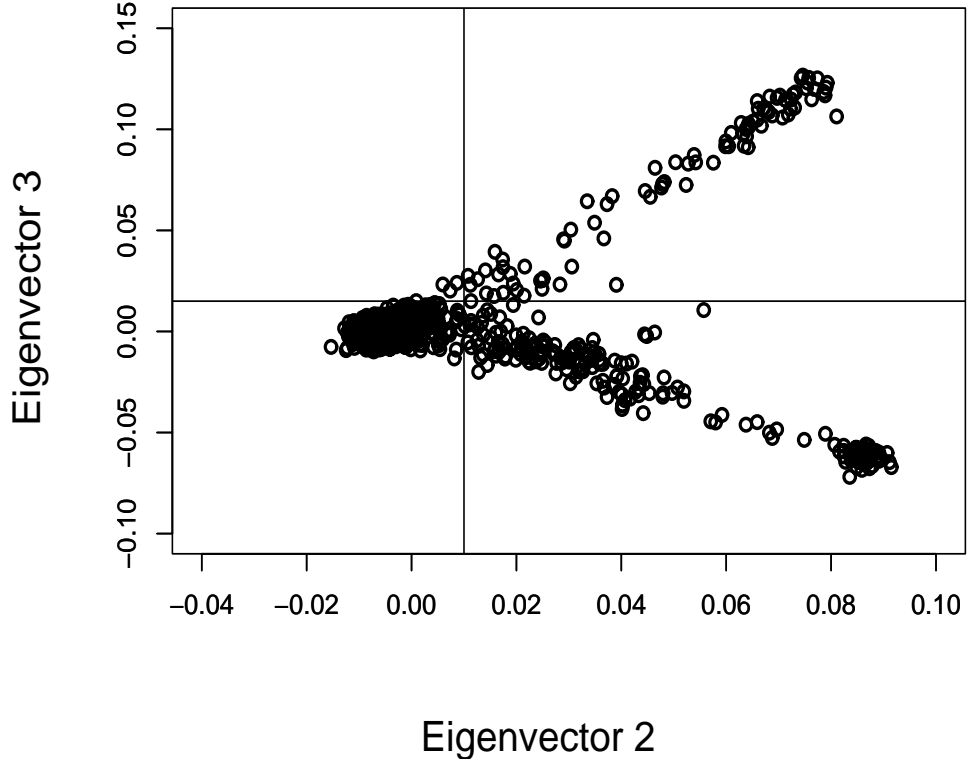
Supplementary Figure 2. Linkage results due to removing families in which affected individuals putatively carry CNV.



Supplementary Figure 2. Linkage results due to removing families in which affected individuals putatively carry CNV. Families all fall in the broad diagnostic category. For 11p, the maximum occurs in 11p13 ($Z_{lf} = 3.33$ at rs2421826). For chromosome 15, there are two up-crossings: the smaller peak occurs at in 15q23 ($Z_{lf} = 3.19$ at rs1372828) and the larger peak in 15q25.3 ($Z_{lf} = 3.41$ near rs1433452).

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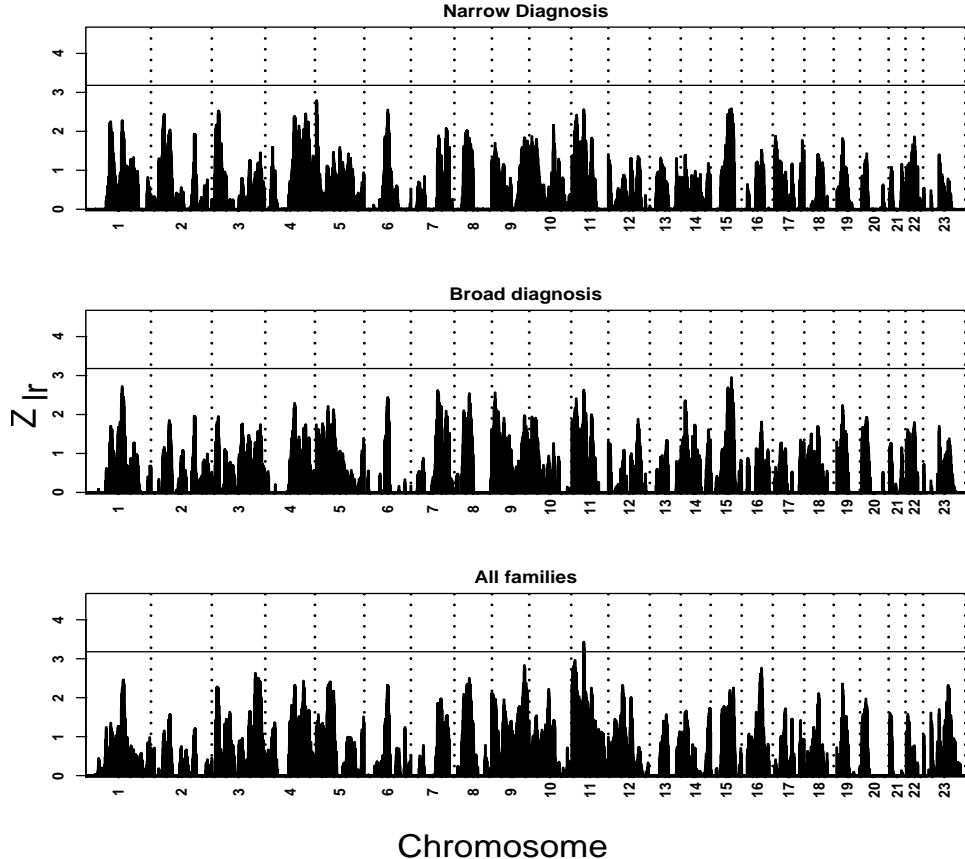
Supplementary Figure 3. Principal component plot used to infer ancestry.



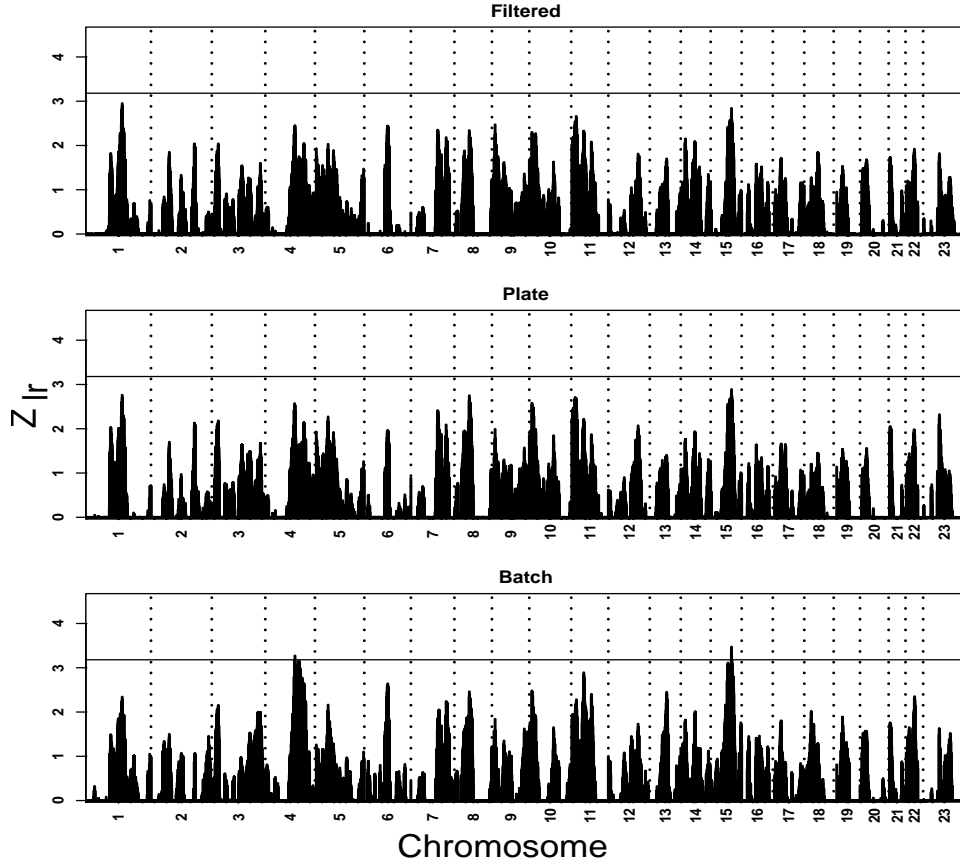
Supplementary Figure 3. Principal component plot used to infer ancestry. A simple way of inferring multidimensional ancestry for N founders of the pedigrees is to construct an N by N matrix Π of pairwise correlations of individuals i and j genotypes for all L loci. For each individual, each locus is coded as 0, 1, or 2 for the number of minor alleles carried. Then principle components can be extracted from Π that represent continuous, multidimensional estimates of ancestry for the sample (Price et al. 2006). Because correlated SNPs can affect the outcome in some settings (BD, unpublished data), we used independent or tag SNPs. Here we plot the second and third eigenvectors (E_2 , E_3) against one another. The cluster in the lower left quadrant corresponds, when we have information, to European ancestry. We apply a rule that a family is of European ancestry if all founders fall in this quadrant, 995/1168 or 85.2% of families fall in this group. Inferred ancestry was used for linkage analysis, including computing European-specific allele frequencies used for linkage analysis, for testing HW, and for relationship evaluation. Very similar clustering for European ancestry obtains from dimensions (E_1, E_2) or (E_1, E_3) (results not shown).

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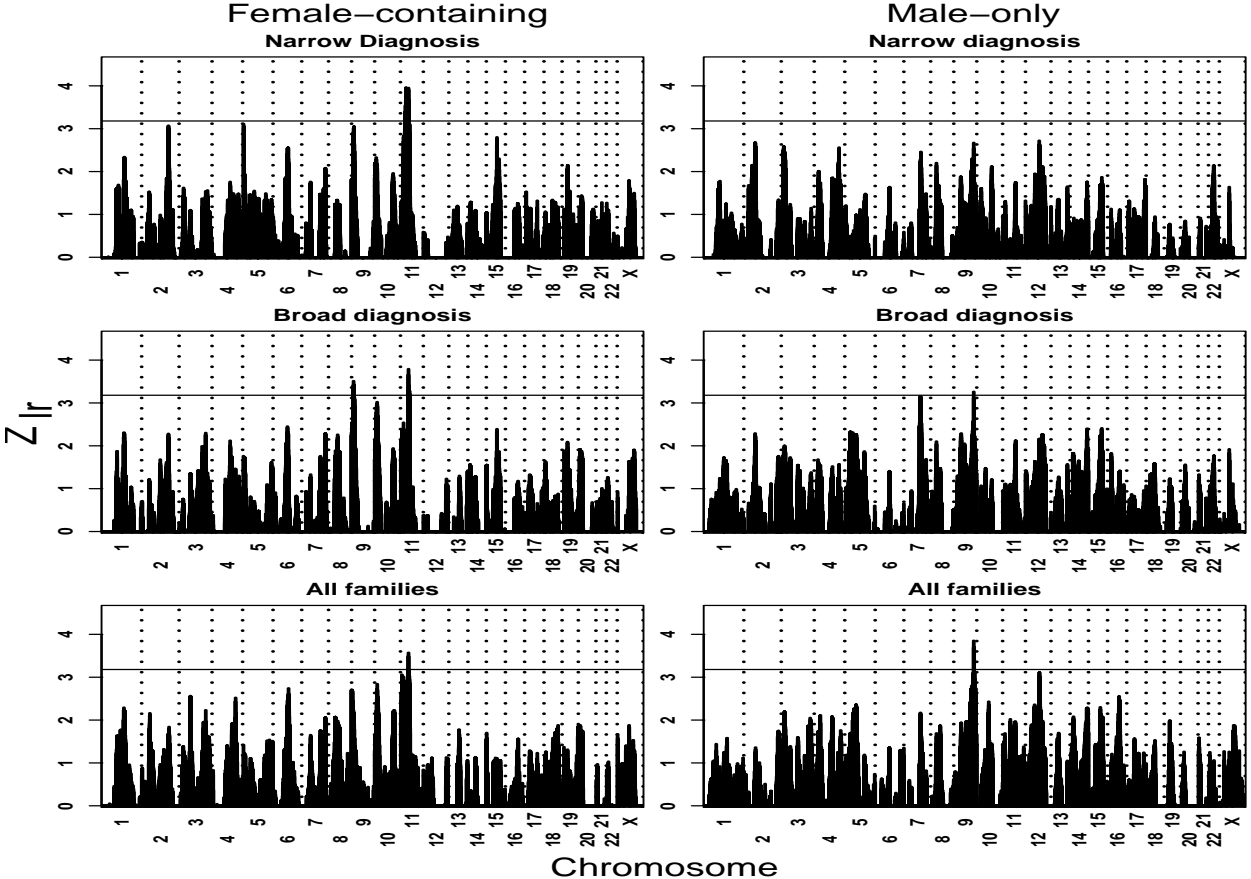
Supplementary Figure 4. Linkage results obtained by analyzing families inferred to be of homogeneous European ancestry (see Supplementary Figure 3 for methods.)



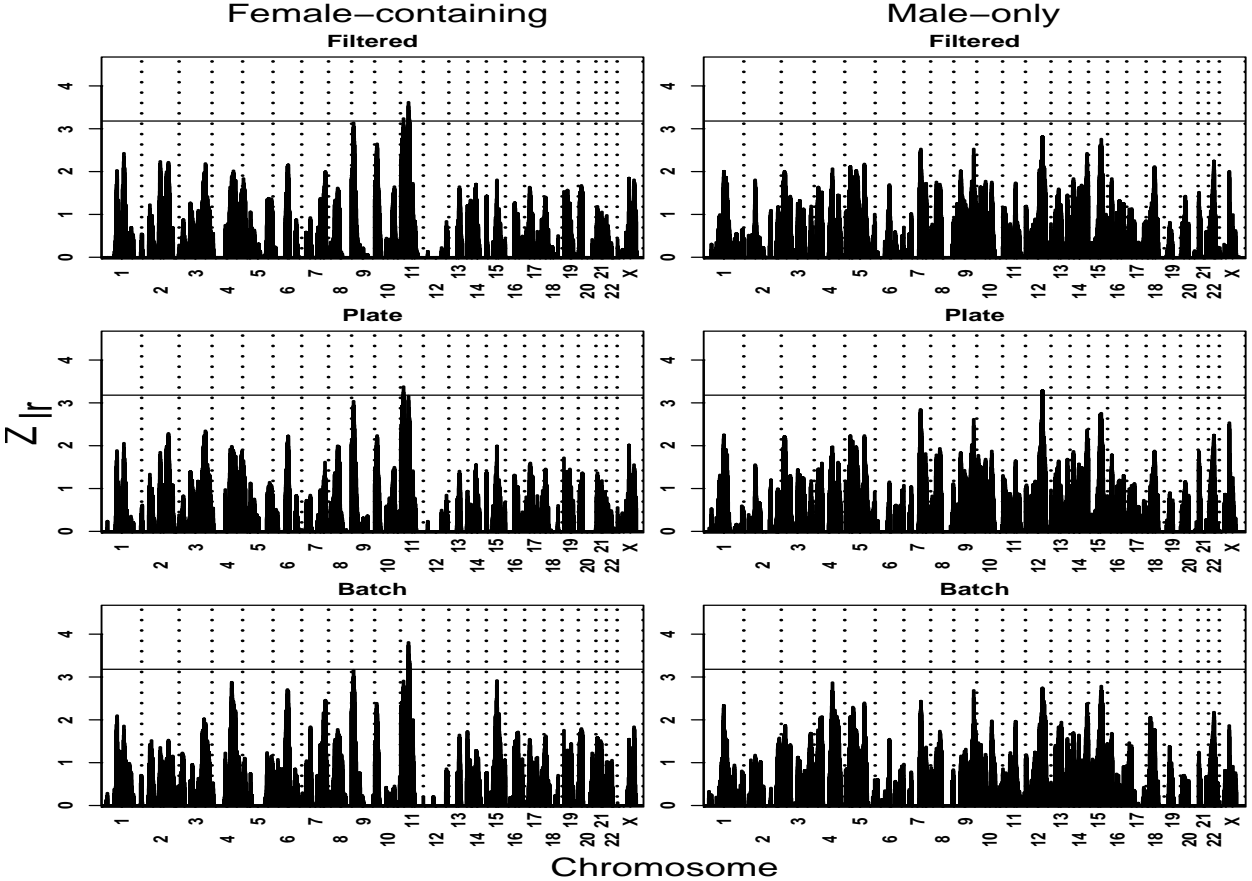
Supplementary Figure 4A. Linkage across the genome for all families of inferred European ancestry, based on levels of diagnostic certainty. Vertical reference lines separate chromosomes, which are ordered. The horizontal reference bar is given at a Z_{lr} of 3.18, the threshold for suggestive linkage according to the Lander/Kruglyak criterion. The suggestive threshold is expected to be crossed, by chance, once per genome scan. It is crossed once, within 11p12 ($Z_{lr} = 3.43$ at rs2421826).



Supplementary Figure 4B. For families inferred European ancestry, the effect on linkage of removing families in which affected individuals putatively carry CNV. For the batch method of calling CNVs, the suggestive linkage threshold is crossed twice, within 4q31.22 ($Z_{lr} = 3.19$ at rs720484; $m-p = 0.00006$) and within 15q25.3 ($Z_{lr} = 3.47$ at rs1433452; $m-p = 0.002$).



Supplementary Figure 4C. Linkage peaks by MO/FC for all families of inferred European ancestry, based on levels of diagnostic certainty. Linkage peaks by MO/FC for all families of inferred European ancestry, based on levels of diagnostic certainty. For FC families and narrow diagnosis, the linkage trace in 11p is complex, crossing the suggestive threshold twice. The first maximum is in 11p14.3 ($Z_{lr} = 3.96$ at rs726859; $m-p = 0.002$) and the other is in 11p12 ($Z_{lr} = 3.95$ at rs1039205; $m-p = 0.005$). For FC/Broad, the peak falls within 9p24.1 ($Z_{lr} = 3.51$ at rs1575284; $m-p = 0.015$) and 11p12 ($Z_{lr} = 3.79$ at rs1039205; $m-p = 0.009$); and for FC/All, to 11p12 ($Z_{lr} = 3.57$ at rs1039205; $m-p = 0.046$). For all MO families, peak falls within 9q33.3 ($Z_{lr} = 3.26$, Broad [$m-p = 0.002$], and $Z_{lr} = 3.85$ for All [$m-p = 0.0005$], both at rs536861).



Supplementary Figure 4D. The effect on linkage of splitting families of inferred European ancestry into FC and MO families while also removing families in which affected individuals putatively carry CNV. For FC families and filtered subset, two peaks cross the suggestive threshold and maximize in two regions on chromosome 11, within 11p15.3 ($Z_{lr}=3.24$ at rs871704; $m-p = 0.335$) and 11p12 ($Z_{lr} = 3.62$ at rs1039205; $m-p = 0.291$); for FC/Plate, to 11p15.3 ($Z_{lr}=3.38$ at rs871704; $m-p = 0.214$); and for FC/Batch, to 11p12 ($Z_{lr} = 3.81$ at rs1039205; $m-p = 0.017$). For MO families and plate subset, a single peak crosses the suggestive threshold and maximizes within 12q23.1 ($Z_{lr} = 3.29$ at rs1560020; $m-p = 0.027$).