

| Primer | Sequence |
|---------------------|---|
| 1F | ACAACGTTCGGGTCTGTGG |
| 2F | ACCAGGAGCCTTGTAACAGC |
| 1R | CAACTGTCGAACGTCGGA |
| 3R | TCGTGAGTTCGATGTTGGTG |
| 2R | TGTTGGTGAAATCGGAGGAC |
| oligo(dT)17 adapter | GACTCGAGTCGACATCGATTTTTTTTTTTTTTTTTTT |
| adapter | GACTCGAGTCGACATCG |
| 6F | ATGCATTCCCTCTACGGTTTATC |
| 1R | AGATTCAGCCCTAAAAACACTCT |
| 7F | CACCGAATTC AATGCATTCCCTCTACGGTTT |
| 6R | GCTCTAGATCAATTAACAGAAAGGAATGATATGA |
| N-6-Myc 1F | CACCGAATTCATTCGGCGATACGGACGAT |
| N-Myc 2F | CACCGAATTCAGGAAACAACATGACCACGG |
| CT-Trun 1R | GCTCTAGAGTCACGAGCCGAAAGTCGCG |
| Y142W sense | CTCACCAATGACCAGACACTATTCTGGTCAGGAATGTATAGCATG |
| Y142W anti-sense | CATGCTATACATTCCTGACCAGAATAGTGTCTGGTCATTGGTGAG |
| Y142H sense | CCAATGACCAGACACTATTCCATTCAGGAATGTATAGCATG |
| Y142H anti-sense | CATGCTATACATTCCTGAATGGAATAGTGTCTGGTCATTGG |
| R52/53A sense | ATGATGATGCTGGTAGTCGCGTTGCGGCAGCGGACGGAAA |
| R52/53A anti-sense | TTTCCGTCCGCTGCCGCAACGCGACTACCAGCATCATCAT |

Table S1. Sequences of oligonucleotide primers used in this study.

| | | |
|------------|-----|---|
| SpARC4 | 1 | MHSLYGLSPSAPAYINKAFVIVVAA SLVNS SGRLLP-FGDTDDDDAGSRVRRADGNM |
| AM588307.1 | 1 | MYSS TLG TLFAPGDINKAFIVV II TSSLVANSFGRLLPAFDDVDTDNGQSRVRRANGDNM |
| AM591092.1 | 1 | MYSSILGILFAPGDINKAFIVV II TSSLVANSFGRLLPAFDDVDTDNGQSRVRRANGDNM |
| AM585924.1 | 1 | MYSSILGILFAPGDINKAFIVV II TSSLVANSFGRLLPAFDDVDTDNGQSRVRRANGDNM |
| | | |
| SpARC4 | 60 | TTELP-LNLGDGTTANLKAIFLGRCYDCEYCS EEQAGLYDCS GLWDAFSSSF SYQ EPCNS |
| AM588307.1 | 61 | TTAAS S SWEVGRGTTTNLEEIFLGRCYDCEYCSDDQKGVHNC SRL WDAFSLSF YQ EPCNN |
| AM591092.1 | 61 | TTAAPSWEVGRGTTTNLEEIFLGRCYDCEYCSDDQKGVHNC S SLWDAFSLSF YQ EPCNN |
| AM585924.1 | 61 | TTAAPSWEVGRGTTTNLEEIFLGRCYDCEYCSDDQKGVHNC S NLWDAFSLSF YQ EPCNN |
| | | |
| SpARC4 | 119 | VPEDFD DDYANMAFVPLTND OTLFYSCM YSMA MAI GRQSS DFTNIELT MLG GLVNGITFCG |
| AM588307.1 | 121 | DPEDFN AYTDMAFIPLAAD OTLFYSCM YSIALAVGRQSS DFTNIELT MLGRL VNGITFCG |
| AM591092.1 | 121 | DPEDFN DYTDMAFIPLAAD OTLFYSC TYSIALAVGRQSS DFTNIELT MLGRL VNGITFCG |
| AM585924.1 | 121 | DPEDFN DHTDMAFIPLAAD OTLFYSC TYSIALAVGRQSS DFTNIELT MLGRL VNGITFCG |
| | | |
| SpARC4 | 179 | MVDAP |
| AM588307.1 | 181 | QTDAP |
| AM591092.1 | 181 | QTDAP |
| AM585924.1 | 181 | QTDAP |

Figure S1. Multiple sequence alignment of the deduced amino acid sequence of SpARC4 with that of 3 ESTs (identified by their accession numbers) from *Paracentrotus lividus*.