

A)

V903

S926

Human $\alpha$ IIb	-PCTVVQCDL QEMARGQRAM	<b>V</b> TVLAFLWLP SLYQRPLDQF VLQ <b>S</b> HAWFNV
Marsupial	-HCTSVCSEL KQMERGQRVM	<b>V</b> TISTI <b>L</b> WMP GLLERSLDQF VLQ <b>S</b> KAWFNV
Fish	-QCVVFDCVA AGLQRDERAI	<b>V</b> RVMSRIWVQ TFLKRPyVNY VLH <b>S</b> TAHYEV
Amphibian	-PCWAVTC <del>SM</del> QNLDRGERAT	<b>V</b> KLHSILWIP SLIKRPQQF TL <b>I</b> SLGSFQV
Amphioxus	-ECIVIDCTL ERLNKDNI <del>AV</del>	<b>V</b> OIRSRLWVD TLLEGGFKET TL <b>T</b> SVADFEV
Insect	AKCIRIECEI YNMAARSEAQ	<b>V</b> LVKARIWNS TLVTEYPRVD RVRI <b>I</b> STAHV
Tunicate	-ECVVFSCSV DMLRANEXVT	<b>V</b> SISSLLLK TVLENDLDS- EIR <b>S</b> EFEFKI

B)

M118

Human $\beta$ 3	YYIMDI <b>SYSM</b> KDDLWSIQNL GTKLATQMRK LTSNL <b>RIGFG</b> AFVDKPVSPY
Marsupial	YYIMDI <b>SNSM</b> RDDLQKIQS <b>L</b> GTKLASEMRK LTSNL <b>RIGFG</b> AFVDKPMSPY
Amphibian	YYIMDI <b>SYSM</b> KDDLI <b>KIQT</b> I GTSLSERMRR LTSNL <b>RIGFG</b> AFVDKPMSPY
Fish	YYIMDI <b>SYSM</b> NDDLSQLRRL GRGLAEEMSK TTSNL <b>RMGFG</b> AFVDKPVSPY
Amphioxus	YYIMDI <b>SKSM</b> DNDLQNLKTL GVNLINKMRN ITSNF <b>RVGFG</b> SFVDKTVAPY
Tunicate	YYILDI <b>SKSM</b> ENDLNSLRAL GREIGTSMQN ITRD <b>FRIGFG</b> SFIDKTVM <b>PY</b>
Insect	YVIMDI <b>TWTM</b> RDDKKTLEEL GAQLSQTLKN LTGNYRLGFG SFADKPTLPM
Hum	MYISPPEALE NPCYDMKTT <b>C</b> LPMFGYKHVL TLTDQVTRFN EEVKKQSNSR
Marsupial	MYISPPEALK NPCYE <b>L</b> KTT <b>C</b> LPMFGYKHVL TLTDQVTRFN EEVRKQNNSR
Amphibian	MFMSPPEVIK NPCYEFNT <b>E</b> MPTFGYKHVL TLTEEVLRFN EEVQKQKVSR
Fish	MYISPEEAVL NPCYSI <b>PYKC</b> QPQFGYRHVL SLTEEVNRFT EEVKKQKVSR
Amphioxus	VNLAPGK-LN EPCGG----C APVFGFRNVL SLTDQ <b>AEEFS</b> VQLGQQQVSG
Tunicate	ISTVPAK-IR NPCND-KAPC VPTYSFHNDL PLTPEIDAFV NSVNNVTHSS
Insect	IL---PQHRE NPCAAERATC EPTYGYRHQL SLTDDIPAFT SAVANSKITG

G221

K253

Hum	NRDAPE <b>GFD</b> AIMQATVCDE KIGWRNDASH LLVFTTD <b>AKT</b> HIALDGRLAG
Marsupial	NRDAPE <b>GFD</b> AIMQATVCDE KIGWRNDASH LLVFTTD <b>AKT</b> HIALDGRLSG
Amphibian	NRDSPEG <b>GFD</b> AVLQAAVCDE KIGWRNESSH LLVFTTD <b>ART</b> HIALDGRLAG
Fish	NRDAPE <b>GFD</b> AIIQAAVCKD KIGWRPGASH LLVFTTD <b>AKT</b> HVALDGRMAG
Amphioxus	NLDQPEG <b>GFD</b> ALMQTAVCNE EIGWREKATK LIVFASDAPP HSAGDGKLGG
Tunicate	NLDNPEG <b>GLD</b> AMMQAIVCKE KINWRKDATH LLVYSTD <b>ASE</b> HYAGDGKLGG
Insect	NLDNPEG <b>GLD</b> ALMQVIVCTK EIGWKEQARK VVILVTDGFM HLAGDG <b>LLAG</b>

**Figure S1 : Sequence conservation of the amino-acids mutated.** Shown are partial protein sequence alignments of  $\alpha$ IIb (panel A) and  $\beta$ 3 (panel B) regions from human (gi 190068/ $\alpha$ IIb and 47078292/ $\beta$ 3), marsupial (gi 126308484 and 126308601), amphibian (gi 209969730 and 148234631), fish (gi 1008138 and 130504431), Amphioxus (gi 210105285 and 219437062), insect (gi 195457234 and 304789) and tunicate (gi 12583701 and 198420437). Amino acids of interest are boxed and high, low and neutral consensus residues are respectively red, blue

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3 and black. Except for K253 of the  $\beta$ 3 subunit, all concerned (boxed) aminoacids were highly  
4 conserved. Sequences were identified by using Psi-blast (with the non-redundant protein  
5 sequence data base) from the NCBI web site ([www.ncbi.nlm.nih.gov](http://www.ncbi.nlm.nih.gov)) and multiple  
6 alignments were generated with Multalin (<http://bioinfo.genotoul.fr/multalin/multalin.html>).  
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