Xenoturbella bocki

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AM159757.1    -------------------------------------------------------TPTSVKKMATFLLKLLAIAALVAVCGSTYCFDN----------SECHGFF---DQYYCCP-----DRHCCDFDR----YTTCTLM----------SDCPRPGQ--PSNRSYCCPT---GTCCTFAEYADANSGIGRKATTTIAASISVFVFVVILGSFVFIYIRRRNSRHTDRSRDDYFVSPNSRSQIPPDWQARCFVTPPPINPVYRAPVYNPPPAQNPPPSYNSGPSSLPPMMQTAVPSPSPPPTYDQIDQTACPKDIHNVDETSR
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Saccoglossus kowalevskii

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FF426230.1    ------------------------------------------------------------------AVLFASASLITCDDTCVAYFDSSGNWHGSFDCNGIL--DGGDTCCGTL--IDKYCCTAS------DTCAAYLDSSGNWHDSFECNGLL----DGGDRCCGTLIDKYCCYNSGAADYYWRGWYTWTMYCLVFVLLLYMQ
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Molgula tectiformis

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CJ429534.1    ------------------------------------------------------------------------------------------------------------KXATYCCK------SGCCKYSQYS--LTKCTNG----------DKCPGRFGEK--DDIYCCPN--KDECCNYEKY----------SNFTTTCSVNEDCVNVTTTSSGGETRLLQYCCTG-GVCCDSEPFLPHDIVLGTSSSTTERTGGNATFPNGSPATNATKQHIRIQPRPTGATYVLQPTRRISAECSLPTAATSATQLPTLKPRWLSSSVSRSLPRPRSIPQRSM
CJ333177.1    ------------------------------------------------------------LYLKKMLLWISVLFSAIAAVTGKNYCSTSH------SSSNSCPGWLDSQNLRYCCV------SGCCDYSQYG--STTCKNN----------VDCPGRYGQI--EQTYCCE----SGCCDSPQYAMTTCHRILIVLVD
CJ428926.1    ---------------------------------------------AGDVRVCIFRFNEIGYCSMWVACLLLFGLHLQVRAGSLCQD----------STDCPGWLDSSFIYCCP-----FGCCSHFQYAEFARFCLSH----------TDCPGKYSQH--NETYCCT----ETCCTFSDY----------LLRS--CSNDTDCPKDHD------DADEIYCCAE--GCCSYSPNTTSKSPIMTWPIYLSVGVFVLLVICFAVCICCTSSEKSQEQEKCIKKEKNNKNNKKKITNEEKLNNRVEEVKSKKTKPKKIKPKKETKLENSITV
CJ416269.1    ------------------------------------------------------------ACVIYELNKLNLKKMLLWIYVLLSAIAVVTGKNYCSTSH------SSSNSCPGWLDSQNLRYCCA------SGCCDYSQYG--STTCKNN----------VDCPGRYGQI--EQTYCCE----SGCCDSTQY----------ATTT--CQQNFDCPGRYG------TKTATYCCKS--GCCEYSQY--SLTKCTNGDKCPGRFGEKDDIYCCPNKDECCNYE
CJ422087.1    ------------------------XRFYAISLLVTLLGCMSLFVHASNHKACIDPIDCKDEEDEKTHCCASGCCDKEEFENQRCLF----------NYNCHKENLDEDLKYCCV------HGCCGYEQYN--DDSCETH----------NDCSRNSSEILPEETFCCK----SGCCTEYIF----------TLTS--CKVHHECPGAND------TKEMEFCCGD--BCCDLKTYNTKAKFCVKDSDCST-----DGYECCD--GVCCMHENVISFGSIIAILLAILIAIAIIFILYKVQQKKAKKNPEYKEGKAKGQQNVAEDKHADQSSV
CJ417954.1    ------------------------------------------------------------------PLICIIFAVAQGQRIECRL----------QIDCGFE---KTNTHCCA------FGCCTNVEWK--AQYCITN----------NDCESRND----TLNHCCD----NGCCEYEEHRENCTGDMDCLDNSRIECKSNDDCYNSLN------NNQDIYCCGI--KCCKAKKYFGYVQYCDYDRDCKS----HVLPECCE--GKCCTSQKNKFIGIFAGLGIALLLTVTIILITRMSKNMGHK
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Botryllus schlosseri

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JG388015.1    ------------------------------------------------------------YNMKSKDQTVSLFCSALLIVLTAKE-------AEGSCYCLL-YSNKNQCCASLSGGVDYCCTATEAKYSGYWCDSN----------ADCGDS------EKSICCQR--RSVCCSNAEY----------EEENPRCASDGDCN----------SEDLPYCCHD-GRCCTFHEHEGEKANCYSDTDCRT----SSKPHCCSD-ATCCRRIDDTFDDTISNDHDTEYNGYSYTGYSAPSASTIVGILIGGSSIIFVIGILVYKACRRPATVRR
JG328516.1    LEYLVVISPDTKFRNPATRLQLAGISEKGDLRSTTTPSIVKKEDRMLVRYFEVELCLLFMLDGVQLSIHQGFYGFNGFNGFGSCNSAT------YTGKHCCTI-GSSKTRCCSS--FGSKYCCTRTEERYRGSYCISS----------VDCSSS------TKPKCCSL--SNKCCTRRKY----------DIETPRCNSITDCAK--------DAKAFYCCDSEARCCTNAAY--AKEYCSSDDNCRT----TTKPHCCDD-SKCCTLKQYEIENPPPSEMLRRNSAALCAVAL
JG338143.1    ------------------------------------------KMEDRMLVRYFEVALCLLFMIDGVHLEWNSDPYYGLGGYDSCDVAT------YTGDKCCYI-GSSQDRCCRS--LHSNYCCTQTEETYGGLYCESS----------IDCSSS------AKPICCSV--SKKCCTRQEH----------EIESPRCNSIAECAN--------VAGAFYCCDEARCCTHATY--TEESCSGDYDCCQY----TTKPHCCDN-SKCCARQNSTQSKTQLRPRCYDGTVLHYAPSLSYFWLE
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Figure S3**. Shisa-like proteins in deuterostomes with tandem cysteine-rich domains**. These sequences are translated from EST sequences. The sequences are denoted by NCBI accession numbers. Cysteine-rich domains are marked by blue letters with conserved cysteines shaded in yellow. Predicted transmembrane segments are underlined. PY motifs ([LP]PxY) are shaded in cyan.