

The large milkweed bugs' Na,K-ATPase β -subunits colocalize with septate junction proteins in a tissue-specific manner

Marlena Herbertz^{1*}, Christian Lohr², Susanne Dobler¹

¹Institute of Cell and Systems Biology of Animals, Molecular Evolutionary Biology, Universität Hamburg, 20146 Hamburg, Germany

²Institute of Zell and Systems Biology of Animals, Neurophysiology, Universität Hamburg, 20146 Hamburg, Germany

*corresponding author: marlena.herbertz@uni-hamburg.de

The coracle protein sequence, also known as protein 4.1 homolog (UniProt: Q9V8R9 (EPB41_DROME) *Drosophila melanogaster*), were used as a reference to search via tblastn for potential homologs in a transcriptome of *O. fasciatus* using the transcriptome shotgun assembly (TSA) method. The coracle protein sequences of different insects were aligned with the coracle protein sequences of *D. melanogaster* (Diptera, Drosophilidae, UniProt accession numbers: Q9V8R9, A0A0B4LFX4, A0A0B4LG23) to search for conserved regions. The species included *Pararge aegeria* (Lepidoptera, Nymphalidae, UniProt accession numbers: S4NVH6, S4P6G9, S4PZT5), *Operophtera brumata* (Lepidoptera, Geometridae, UniProt accession numbers: A0A0L7KHN0, A0A0L7L3N5), *Danaus plexippus plexippus* (Lepidoptera, Nymphalidae, UniProt accession number: A0A212EJP2), *Corethrella appendiculata* (Diptera, Corethrellidae, UniProt accession number: W4VRQ9), *Cotesia congregata* (Hymenoptera, Braconidae, UniProt accession number: B1GS95), *Rhodnius prolixus* (Hemiptera, Reduviidae, UniProt accession number: G1K0N0) and *Oncopeltus fasciatus* (Hemiptera, Lygaeidae, NCBI TSA sequence ID: GCXY01047324.1). The multiple sequence alignment was performed with the online tool Clustal Omega provided by EMBL-EBI

Here are the results. The antibody epitope is highlighted in blue.

CLUSTAL O(1.2.4) multiple sequence alignment

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sp|Q9V8R9|EPB41_DROME      MP AEIKP-SAP-----AEP----- 13
tr|A0A0B4LFX4|A0A0B4LFX4_DROME MP AEIKP-SAP-----AEP----- 13
tr|A0A0B4LG23|A0A0B4LG23_DROME MP AEIKP-SAP-----AEP----- 13
GCXY01047324.1,          ----- 0
GCXY01047324.2,          ----- 0
tr|W4VRQ9|W4VRQ9_9DIPT      MPGESAKTVSP-----TEP----- 14
tr|S4NVH6|S4NVH6_9NEOP      ----- 0
tr|S4P6G9|S4P6G9_9NEOP      MRESLRRLASDDGMTAR---LNAGRVRVELLTGEHITVDVER----- 39
tr|S4PZT5|S4PZT5_9NEOP      ----- 0
tr|B1GS95|B1GS95_COTCN      ----- 0
tr|G1K0N0|G1K0N0_RHOPR      ----- 0
tr|A0A0L7KHN0|A0A0L7KHN0_9NEOP MPESVAK EAKV-----AKS----- 14
tr|A0A0L7L3N5|A0A0L7L3N5_9NEOP ----- 0
tr|A0A212EJP2|A0A212EJP2_DANPL MPEGVAK EAKD-----EKP----- 14
                                ***                               *****

sp|Q9V8R9|EPB41_DROME      -----ETPTKSKPKSSSSSHGKPALARVTLLDGSLLDVSIDRKAIGRDVIN--SICA 63
tr|A0A0B4LFX4|A0A0B4LFX4_DROME -----ETPTKSKPKSSSSSHGKPALARVTLLDGSLLDVSIDRKAIGRDVIN--SICA 63
tr|A0A0B4LG23|A0A0B4LG23_DROME -----ETPTKSKPKSSSSSHGKPALARVTLLDGSLLDVSIDRKAIGRDVIN--SICA 63
GCXY01047324.1,          -----GKPALAVVQLLDDKTLDVYVERKAKGEKIFD--EVCA 35
GCXY01047324.2,          ----- 0
tr|W4VRQ9|W4VRQ9_9DIPT      -----VATPTTPKKKQTNTSGGKAALAKVTLLDGSVLDVTIYRKATGRDLLN--SVCA 65
tr|S4NVH6|S4NVH6_9NEOP      ----- 0
tr|S4P6G9|S4P6G9_9NEOP      -----KATGADLLDK--VCE 52
tr|S4PZT5|S4PZT5_9NEOP      ----- 0
tr|B1GS95|B1GS95_COTCN      ----- 0
tr|G1K0N0|G1K0N0_RHOPR      ----- 0
tr|A0A0L7KHN0|A0A0L7KHN0_9NEOP -----DAKAKAKEASPRRRPTGNLAKVLK--VAR---QHAGERGQGGQSGQ--ERCE 59
tr|A0A0L7L3N5|A0A0L7L3N5_9NEOP ----- 0
tr|A0A212EJP2|A0A212EJP2_DANPL -----KAKE-----SPKRRSGNLARIKVELLDGSTMDLEADRKIRGHDLLS--KVCD 59
                                *****                                *

sp|Q9V8R9|EPB41_DROME      GLN LIEKDY-FGLTYETPTDPR-----TWLDLEKPV S----- 94
tr|A0A0B4LFX4|A0A0B4LFX4_DROME GLN LIEKDY-FGLTYETPTDPR-----TWLDLEKPV S----- 94
tr|A0A0B4LG23|A0A0B4LG23_DROME GLN LIEKDY-FGLTYETPTDPR-----TWLDLEKPV S----- 94
GCXY01047324.1,          HLDLREKDY-FGLNYRDKAGR R-----TWLDLDKRVG----- 66
GCXY01047324.2,          ----- 0
tr|W4VRQ9|W4VRQ9_9DIPT      GLN ILEKDY-FGLIYSTPNDPR-----VWLELEKPVG----- 96
tr|S4NVH6|S4NVH6_9NEOP      ----- 0
tr|S4P6G9|S4P6G9_9NEOP      VLDVIESDY-FGLLHVQRGDP-----RVWVDLGRRLS----- 83
tr|S4PZT5|S4PZT5_9NEOP      ----- 0
tr|B1GS95|B1GS95_COTCN      ----- 0
tr|G1K0N0|G1K0N0_RHOPR      ----- 0

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tr A0A0L7KHN0 A0A0L7KHN0_9NEOP	-----	59
tr A0A0L7L3N5 A0A0L7L3N5_9NEOP	-----	0
tr A0A212EJP2 A0A212EJP2_DANPL	SLNLVEKDY-FGLLYEDRGDPR-----VWIDLDRVS-----	90
	* **** *****	
sp Q9V8R9 EPB41_DROME	---KFFRTDTWPLTFAVKFYP-----PEPSQLKEDITRYHLCQLQVR-NDILEGRLPCTF	144
tr A0A0B4LFX4 A0A0B4LFX4_DROME	---KFFRTDTWPLTFAVKFYP-----PEPSQLKEDITRYHLCQLQVR-NDILEGRLPCTF	144
tr A0A0B4LG23 A0A0B4LG23_DROME	---KFFRTDTWPLTFAVKFYP-----PEPSQLKEDITRYHLCQLQVR-NDILEGRLPCTF	144
GCXY01047324.1,	---KVLKAEPWKLDFEVKFYP-----KDPSQLQEDFTRYLLCLQVR-NDILSGKLPCSF	116
GCXY01047324.2,	-----	0
tr W4VRQ9 W4VRQ9_9DIPT	---KFFRSDPWNVTFAVKFYP-----PEPAQLQEDITRYHLCQLQVR-NDILEERLPSSF	146
tr S4NVH6 S4NVH6_9NEOP	-----	0
tr S4P6G9 S4P6G9_9NEOP	---KTFRNEPWDVKFTAKFYP-----PEPSELRDDQSRYLGLS-----	119
tr S4PZT5 S4PZT5_9NEOP	-----RYQLGLS---VRRDLMEGRLTCSN	21
tr B1GS95 B1GS95_COTCN	-----	0
tr G1K0N0 G1K0N0_RHOPR	-----	0
tr A0A0L7KHN0 A0A0L7KHN0_9NEOP	-----GQSQGGVSPTPTHREPRQGR LPCST	84
tr A0A0L7L3N5 A0A0L7L3N5_9NEOP	-----	0
tr A0A212EJP2 A0A212EJP2_DANPL	---KMLKHEPWEVRFVKFYP-----PEPTQLQEELTRYQLVLAIRR-DLLEGR LPCST	140
	*** *****	
sp Q9V8R9 EPB41_DROME	VTHALLGSYLVQSEMGDYDAEEMPTRAYLKDFKIAP-----N--QTAELEDKVMDL	193
tr A0A0B4LFX4 A0A0B4LFX4_DROME	VTHALLGSYLVQSEMGDYDAEEMPTRAYLKDFKIAP-----N--QTAELEDKVMDL	193
tr A0A0B4LG23 A0A0B4LG23_DROME	VTHALLGSYLVQSEMGDYDAEEMPTRAYLKDFKIAP-----N--QTAELEDKVMDL	193
GCXY01047324.1,	VTHAMLSYLVQSLSQGDYSAAEYPDASYLAGFKFCP-----DHDAAPGLEERVMTL	167
GCXY01047324.2,	-----	0
tr W4VRQ9 W4VRQ9_9DIPT	VTHALLGSFLVQSELGDYDPIEMKDRAYLKDFKFAP-----H--QTPELEDKVIDL	195
tr S4NVH6 S4NVH6_9NEOP	-----	0
tr S4P6G9 S4P6G9_9NEOP	-----	119
tr S4PZT5 S4PZT5_9NEOP	ITYALLASYVLQSEVGDREAR--VSTTLLSAHDSVP-----LHVLPDLEEKIDEL	70
tr B1GS95 B1GS95_COTCN	-----	0
tr G1K0N0 G1K0N0_RHOPR	-----	0
tr A0A0L7KHN0 A0A0L7KHN0_9NEOP	VTHALLASYLLQSELGDYDGKE-AGAGLCKQLKLV-----PAACTPDLEEKVTEL	134
tr A0A0L7L3N5 A0A0L7L3N5_9NEOP	-----	0
tr A0A212EJP2 A0A212EJP2_DANPL	VTHALLASYLLQSELGDYDQPAPG---LCKQLKLV-----PAACTPELEEKVLEL	188

sp Q9V8R9 EPB41_DROME	HKTHKGQSPAEAEHLHYLENAK--KLAMYGVDLHPAKDS-EGVDIMLGVCASG---LLVYR	247
tr A0A0B4LFX4 A0A0B4LFX4_DROME	HKTHKGQSPAEAEHLHYLENAK--KLAMYGVDLHPAKDS-EGVDIMLGVCASG---LLVYR	247
tr A0A0B4LG23 A0A0B4LG23_DROME	HKTHKGQSPAEAEHLHYLENAK--KLAMYGVDLHPAKDS-EGVDIMLGVCASG---LLVYR	247
GCXY01047324.1,	HKGHKGQTPAEAEHLHYLENAK--KLSMYGVDMHPAKDS-EGVDILLGVNSTG---IQVYQ	221
GCXY01047324.2,	-----	0
tr W4VRQ9 W4VRQ9_9DIPT	HKTHKGQTPAEAEHLNYLENAK--RLNLYGVDLHPAKDS-EGVDIFIGVCASG---LLVFK	249
tr S4NVH6 S4NVH6_9NEOP	-----MYGAEVHNVKDS-DDVDISLAVCAAG---ISVAR	30
tr S4P6G9 S4P6G9_9NEOP	-----	119
tr S4PZT5 S4PZT5_9NEOP	YRK-----	73
tr B1GS95 B1GS95_COTCN	-----	0

tr G1K0N0 G1K0N0_RHOPR	-----	0
tr A0A0L7KHN0 A0A0L7KHN0_9NEOP	HKTHNYLLQSEL--GDYEGKEAGTGLCKQLKVPP-----AACTPDLEEKVTEA	181
tr A0A0L7L3N5 A0A0L7L3N5_9NEOP	-----	0
tr A0A212EJP2 A0A212EJP2_DANPL	YKTHRGQTPAEALNYLENAK--KLAMYGVDLHPAKDS-ENVDITLGVCSG---LLVHR	242
	*	
sp Q9V8R9 EPB41_DROME	DKLRINRFAWPKILKISYKRHHFY---IKIRPGEFEQYESTIGFKLANHRAAKKLWKSCV	304
tr A0A0B4LFX4 A0A0B4LFX4_DROME	DKLRINRFAWPKILKISYKRHHFY---IKIRPGEFEQYESTIGFKLANHRAAKKLWKSCV	304
tr A0A0B4LG23 A0A0B4LG23_DROME	DKLRINRFAWPKILKISYKRHHFY---IKIRPGEFEQYESTIGFKLANHRAAKKLWKSCV	304
GCXY01047324.1,	EKLRINRFAWPKILKISYRRNIFY--IKIRPGEFEQYEQTVGFKLDSSRAAKNLWKVCV	278
GCXY01047324.2,	-----	0
tr W4VRQ9 W4VRQ9_9DIPT	DKLRINRFAWPKILKISYKRSNFY---IKLRPGEFEQYESTVGFKLENHRAAKKLWKACV	306
tr S4NVH6 S4NVH6_9NEOP	DGLVMNRFPTWKILKISYHKRVYT---LRLRASEFDEYETHLSFKLPSSRASKR-----	81
tr S4P6G9 S4P6G9_9NEOP	-----	119
tr S4PZT5 S4PZT5_9NEOP	-----	73
tr B1GS95 B1GS95_COTCN	-----ESTIGFKLANHRAAKKLWKVCV	22
tr G1K0N0 G1K0N0_RHOPR	-----	0
tr A0A0L7KHN0 A0A0L7KHN0_9NEOP	HKLRINRFAWPKILKISYKRHNFY--VKLRPGEFEQFESTVGFKLGNHRAAKKLWKTC	238
tr A0A0L7L3N5 A0A0L7L3N5_9NEOP	-----	0
tr A0A212EJP2 A0A212EJP2_DANPL	EKLRINRFAWPKILKISYKRHNFY--VKLRPGEFEQFESTVGFKLANHRAAKKLWKTCV	299

sp Q9V8R9 EPB41_DROME	EHHTFFRLMTPEPVS-----KSK-MFPVFGSTY-RYKGRTQAESTNTP-----	345
tr A0A0B4LFX4 A0A0B4LFX4_DROME	EHHTFFRLMTPEPVS-----KSK-MFPVFGSTY-RYKGRTQAESTNTP-----	345
tr A0A0B4LG23 A0A0B4LG23_DROME	EHHTFFRLMTPEPVS-----KSK-MFPVFGSTY-RYKGRTQAESTNTP-----	345
GCXY01047324.1,	DQHTFFRLMSADATK-----RPGLLPRLGSLY-RFNRTQAQEVMSVG-----	320
GCXY01047324.2,	-----	0
tr W4VRQ9 W4VRQ9_9DIPT	EHHTFFRLMTPEPIT-----NRG-IFPRLGSKF-RYSGRTHYETRQQP-----	347
tr S4NVH6 S4NVH6_9NEOP	-----	81
tr S4P6G9 S4P6G9_9NEOP	-----	119
tr S4PZT5 S4PZT5_9NEOP	-----	73
tr B1GS95 B1GS95_COTCN	EHHTFFRLMSPEPVK-----KVG-LLPHLGSRF-RYSGRTHYETKKIP-----	63
tr G1K0N0 G1K0N0_RHOPR	-----	0
tr A0A0L7KHN0 A0A0L7KHN0_9NEOP	FTPTPNSVSTYTTVVHFIPSANSTDIPEWRPPEVFRGPF-----	279
tr A0A0L7L3N5 A0A0L7L3N5_9NEOP	-----	0
tr A0A212EJP2 A0A212EJP2_DANPL	EHHTFFRLLSPEP-----VSRSTLFPRLGSRF-RYSGRTLHETRNEHPRRTQPTFARA	351
sp Q9V8R9 EPB41_DROME	-----	345
tr A0A0B4LFX4 A0A0B4LFX4_DROME	-----	345
tr A0A0B4LG23 A0A0B4LG23_DROME	-----	345
GCXY01047324.1,	-----	320
GCXY01047324.2,	-----	0
tr W4VRQ9 W4VRQ9_9DIPT	-----	347
tr S4NVH6 S4NVH6_9NEOP	-----	81
tr S4P6G9 S4P6G9_9NEOP	-----	119
tr S4PZT5 S4PZT5_9NEOP	-----	73

tr B1GS95 B1GS95_COTCN	-----	63
tr G1K0N0 G1K0N0_RHOPR	-----	0
tr A0A0L7KHN0 A0A0L7KHN0_9NEOP	-----	279
tr A0A0L7L3N5 A0A0L7L3N5_9NEOP	-----NSVSVPALAAGEKEEPMPEASKRHTMPPQPAPRPTIKDKK---	40
tr A0A212EJP2 A0A212EJP2_DANPL	LSHRR-----LSSRSADALASG-----DKEEMPPEATKRHTMPPQPAPRPTVKDKK---	397
	*****	***

sp Q9V8R9 EPB41_DROME	-----	345
tr A0A0B4LFX4 A0A0B4LFX4_DROME	-----	345
tr A0A0B4LG23 A0A0B4LG23_DROME	-----	345
GCXY01047324.1,	-----NPRK-----	324
GCXY01047324.2,	-----	0
tr W4VRQ9 W4VRQ9_9DIPT	-----	347
tr S4NVH6 S4NVH6_9NEOP	-----	81
tr S4P6G9 S4P6G9_9NEOP	-----	119
tr S4PZT5 S4PZT5_9NEOP	-----	73
tr B1GS95 B1GS95_COTCN	-----IERQP-----PQFER--	73
tr G1K0N0 G1K0N0_RHOPR	-----	0
tr A0A0L7KHN0 A0A0L7KHN0_9NEOP	-----	279
tr A0A0L7L3N5 A0A0L7L3N5_9NEOP	-----PPPGAVKVMPTAPDKKKEEKLVEKKIPAENGTETSSDPGITNNT	84
tr A0A212EJP2 A0A212EJP2_DANPL	-----PPPGAVRVMPAPAR-----PNDTPAENGDTTSDPGITNNV	433

sp Q9V8R9 EPB41_DROME	-----	345
tr A0A0B4LFX4 A0A0B4LFX4_DROME	-----	345
tr A0A0B4LG23 A0A0B4LG23_DROME	-----	345
GCXY01047324.1,	-----DGNFNRH-----HSLG--P	336
GCXY01047324.2,	-----	0
tr W4VRQ9 W4VRQ9_9DIPT	-----	347
tr S4NVH6 S4NVH6_9NEOP	-----	81
tr S4P6G9 S4P6G9_9NEOP	-----	119
tr S4PZT5 S4PZT5_9NEOP	-----	73
tr B1GS95 B1GS95_COTCN	-----SLS-----GRRLTSRSM DALGGSQTVETYG-----	98
tr G1K0N0 G1K0N0_RHOPR	-----	0
tr A0A0L7KHN0 A0A0L7KHN0_9NEOP	-----	279
tr A0A0L7L3N5 A0A0L7L3N5_9NEOP	EGTPKKSKVSVQTSTEISNFKFISKNVRLLTGGFGLFGGKKEKSPKEKEEKSPKSKDKSP	144
tr A0A212EJP2 A0A212EJP2_DANPL	ETPR-----KSKGSFGLFGGKKEKSPKEEKSPKEKPLKIKE	469

sp Q9V8R9 EPB41_DROME	-----	345
tr A0A0B4LFX4 A0A0B4LFX4_DROME	-----	345
tr A0A0B4LG23 A0A0B4LG23_DROME	-----	345
GCXY01047324.1,	SRSLEPL-----	343
GCXY01047324.2,	-----	0
tr W4VRQ9 W4VRQ9_9DIPT	-----	347
tr S4NVH6 S4NVH6_9NEOP	-----	81
tr S4P6G9 S4P6G9_9NEOP	-----	119

tr	S4PZT5	S4PZT5_9NEOP	-----	73
tr	B1GS95	B1GS95_COTCN	-----	98
tr	G1K0N0	G1K0N0_RHOPR	-----	0
tr	A0A0L7KHN0	A0A0L7KHN0_9NEOP	-----	279
tr	A0A0L7L3N5	A0A0L7L3N5_9NEOP	KADKSPKSKDKKAKEP-----KTKVAV	166
tr	A0A212EJP2	A0A212EJP2_DANPL	KSDKSPKSKDKSDKSPKDKVKDP-----KAKVAV	503

sp	Q9V8R9	EPB41_DROME	-----VDR-----TPPKFNRT-----	356
tr	A0A0B4LFX4	A0A0B4LFX4_DROME	-----VDR-----TPPKFNRT-----	356
tr	A0A0B4LG23	A0A0B4LG23_DROME	-----VDR-----TPPKFNRT-----	356
GCXY01047324.1,				343
GCXY01047324.2,				0
tr	W4VRQ9	W4VRQ9_9DIPT	-----VDR-----PAPDFKRS-----	358
tr	S4NVH6	S4NVH6_9NEOP	-----	81
tr	S4P6G9	S4P6G9_9NEOP	-----	119
tr	S4PZT5	S4PZT5_9NEOP	-----	73
tr	B1GS95	B1GS95_COTCN	-----SEPSKRHTMSY	109
tr	G1K0N0	G1K0N0_RHOPR	-----KKKKSSPSKGFSY	13
tr	A0A0L7KHN0	A0A0L7KHN0_9NEOP	-----	279
tr	A0A0L7L3N5	A0A0L7L3N5_9NEOP	LDTSNVSSNPDNSREKSPAK----SPSKDEKPSFTKPYEYTDTERSPTRNKPFIQGAFSY	222
tr	A0A212EJP2	A0A212EJP2_DANPL	LDTSDVVSD--NSLDKSPVKDEKPS-----FTKPYEYDTEKSPAR-KPLTKGAFSY	552

sp	Q9V8R9	EPB41_DROME	-----LSGARLTSRSM DALALA----EKEKVA-----RKSSTLDHRGD	390
tr	A0A0B4LFX4	A0A0B4LFX4_DROME	-----LSGARLTSRSM DALALA----EKEKVA-----RKSSTLDHRGD	390
tr	A0A0B4LG23	A0A0B4LG23_DROME	-----LSGARLTSRSM DALALA----EKEKVA-----RKSSTLDHRGD	390
GCXY01047324.1,				343
GCXY01047324.2,				0
tr	W4VRQ9	W4VRQ9_9DIPT	-----LTGKGLSSRSM DALALQ----KEKEAE-----KNVN-----	385
tr	S4NVH6	S4NVH6_9NEOP	-----	81
tr	S4P6G9	S4P6G9_9NEOP	-----	119
tr	S4PZT5	S4PZT5_9NEOP	-----	73
tr	B1GS95	B1GS95_COTCN	EPEMI-PDMEH--IDQ--RPSI-----	126
tr	G1K0N0	G1K0N0_RHOPR	EAKKEQSEDDESA AENQTT PVKVGVLAFNYAPNAQELVKVDDEEENKR-----LSE---	65
tr	A0A0L7KHN0	A0A0L7KHN0_9NEOP	-----	279
tr	A0A0L7L3N5	A0A0L7L3N5_9NEOP	EKEPI-SDEKQRAADEAQSP TTRKAGLAFNYAPGEDKKLAESA EKRKTPEDPSKLKTPGL	281
tr	A0A212EJP2	A0A212EJP2_DANPL	DKEPV-SDEKQRALDGAQSPGTRKAGLAFNYAPGEEKVAESA EKRKTPDDL SKLKT PGI	611

sp	Q9V8R9	EPB41_DROME	R-----NADGDAHSRSP IK-----	404
tr	A0A0B4LFX4	A0A0B4LFX4_DROME	R-----NADGDAHSRSP IK-----	404
tr	A0A0B4LG23	A0A0B4LG23_DROME	R-----NADGDAHSRSP IK-----	404
GCXY01047324.1,				343
GCXY01047324.2,				0
tr	W4VRQ9	W4VRQ9_9DIPT	-----	385
tr	S4NVH6	S4NVH6_9NEOP	-----	81

tr	S4P6G9	S4P6G9_9NEOP	-----	119
tr	S4PZT5	S4PZT5_9NEOP	-----	73
tr	B1GS95	B1GS95_COTCN	-----	126
tr	G1K0N0	G1K0N0_RHOPR	-----RLIEES-----KNSLPPEVVVEE---EHKKVQVDVVKD---V-	97
tr	A0A0L7KHN0	A0A0L7KHN0_9NEOP	-----	279
tr	A0A0L7L3N5	A0A0L7L3N5_9NEOP	DYVQSALLKEQA-----KNLIDPTLALLDSERAHHEAPVAAAVAVPLTAA	326
tr	A0A212EJP2	A0A212EJP2_DANPL	DYVQSAALKETAKSP-----RSNLIIDPTLALLDSERAHHETPVAIAP-----VA	655

sp	Q9V8R9	EPB41_DROME	-----NKKEK-----	409
tr	A0A0B4LFX4	A0A0B4LFX4_DROME	-----NKKEKNP-----N	412
tr	A0A0B4LG23	A0A0B4LG23_DROME	-----NKKEK-----	409
			-----	343
			-----	0
tr	W4VRQ9	W4VRQ9_9DIPT	-----	385
tr	S4NVH6	S4NVH6_9NEOP	-----	81
tr	S4P6G9	S4P6G9_9NEOP	-----	119
tr	S4PZT5	S4PZT5_9NEOP	-----	73
tr	B1GS95	B1GS95_COTCN	-----	126
tr	G1K0N0	G1K0N0_RHOPR	KKATDDTTKHRKSGGFG-----	114
tr	A0A0L7KHN0	A0A0L7KHN0_9NEOP	-----	279
tr	A0A0L7L3N5	A0A0L7L3N5_9NEOP	KPAENEIQVVIITGRYNPKSKKLLDDANGTVLVTKGTINRANGKIQTDKQINTKSGQVIF	386
tr	A0A212EJP2	A0A212EJP2_DANPL	KKSDNEIQVVIITGRYNPKTKKLLDDANGTILVTKGRLDKSTSKIQTTELINTKSGQINY	715

sp	Q9V8R9	EPB41_DROME	-----DADKEAK-----L----REKKQ-----KEKEEKERKER-	433
tr	A0A0B4LFX4	A0A0B4LFX4_DROME	ELYLDLMDADKEAK-----L----REKKQ-----KEKEEKERKER-	443
tr	A0A0B4LG23	A0A0B4LG23_DROME	-----DADKEAK-----L----REKKQ-----KEKEEKERKER-	433
			-----	343
			-----	0
tr	W4VRQ9	W4VRQ9_9DIPT	-----KDANKRHTMSHPPDHIP---DLDSPTRGSRSP-----IKKDKKERKPVG	426
tr	S4NVH6	S4NVH6_9NEOP	-----	81
tr	S4P6G9	S4P6G9_9NEOP	-----	119
tr	S4PZT5	S4PZT5_9NEOP	-----	73
tr	B1GS95	B1GS95_COTCN	-----	126
tr	G1K0N0	G1K0N0_RHOPR	-----	114
tr	A0A0L7KHN0	A0A0L7KHN0_9NEOP	-----	279
tr	A0A0L7L3N5	A0A0L7L3N5_9NEOP	TDPVTGKQETKNGHLDSKSGHILFTSGVIDPKTGKIDPTLAQQYCFVEKSKDKVGAKPGR	446
tr	A0A212EJP2	A0A212EJP2_DANPL	TDPTTGKEDVKQGHVDSKTGHILFTSGVDFPKTGKLDPTLAQQYCFVEKLEDKVGKNKPGR	775

sp	Q9V8R9	EPB41_DROME	-----	433
tr	A0A0B4LFX4	A0A0B4LFX4_DROME	-----	443
tr	A0A0B4LG23	A0A0B4LG23_DROME	-----	433
			-----	343
			-----	0
tr	W4VRQ9	W4VRQ9_9DIPT	GVSVLPVAGKKDKD-----	440

tr	S4NVH6	S4NVH6_9NEOP	-----	81
tr	S4P6G9	S4P6G9_9NEOP	-----	119
tr	S4PZT5	S4PZT5_9NEOP	-----	73
tr	B1GS95	B1GS95_COTCN	-----	126
tr	G1K0N0	G1K0N0_RHOPR	-----	114
tr	A0A0L7KHN0	A0A0L7KHN0_9NEOP	-----	279
tr	A0A0L7L3N5	A0A0L7L3N5_9NEOP	EVDLVVITGKYDGKHKRLDVSHGHVDVSRVVGSEGTVSSNYGVIDPRSGKIDYIDPKTG	506
tr	A0A212EJP2	A0A212EJP2_DANPL	EVDLVVITGKYDGKHKKLDASHGHVEVSKAIVAPDGTVHSNYGLIDPQKGKIDLIDVKTG	835
sp	Q9V8R9	EPB41_DROME	-----	433
tr	A0A0B4LFX4	A0A0B4LFX4_DROME	-----	443
tr	A0A0B4LG23	A0A0B4LG23_DROME	-----	433
	GCXY01047324.1,		-----	343
	GCXY01047324.2,		-----	0
tr	W4VRQ9	W4VRQ9_9DIPT	-----	440
tr	S4NVH6	S4NVH6_9NEOP	-----	81
tr	S4P6G9	S4P6G9_9NEOP	-----	119
tr	S4PZT5	S4PZT5_9NEOP	-----	73
tr	B1GS95	B1GS95_COTCN	-----	126
tr	G1K0N0	G1K0N0_RHOPR	-----	114
tr	A0A0L7KHN0	A0A0L7KHN0_9NEOP	-----	279
tr	A0A0L7L3N5	A0A0L7L3N5_9NEOP	KLEPKQAYVDLKTGNILVTTGVTDPKSGKVDSSLGQQFSIVEKDATKA-NREVRLVIVTS	565
tr	A0A212EJP2	A0A212EJP2_DANPL	KQDPKQAYVDQKTGNLLVTTGVHDPKSGKVDSSLGQQFSIVEKDATKA-NREVRLVVTS	894
sp	Q9V8R9	EPB41_DROME	-----EKRELEEEKK	442
tr	A0A0B4LFX4	A0A0B4LFX4_DROME	-----EKRELEEEKK	452
tr	A0A0B4LG23	A0A0B4LG23_DROME	-----EKRELEEEKK	442
	GCXY01047324.1,		-----	343
	GCXY01047324.2,		-----	0
tr	W4VRQ9	W4VRQ9_9DIPT	-----GKDGKETN	449
tr	S4NVH6	S4NVH6_9NEOP	-----	81
tr	S4P6G9	S4P6G9_9NEOP	-----	119
tr	S4PZT5	S4PZT5_9NEOP	-----	73
tr	B1GS95	B1GS95_COTCN	-----	126
tr	G1K0N0	G1K0N0_RHOPR	-----	114
tr	A0A0L7KHN0	A0A0L7KHN0_9NEOP	-----	279
tr	A0A0L7L3N5	A0A0L7L3N5_9NEOP	KYDLKNKKLDPTFAHVDSVKGVLSGTDGKIYTEYGVIDPRTGEIQITDSATGKQEVKHAI	625
tr	A0A212EJP2	A0A212EJP2_DANPL	KYDLKNKKLEPSFAHIDSIGVLSGTDGKIYTEYGVIDPRTGDIILVTDSTGKQEIKRAT	954
sp	Q9V8R9	EPB41_DROME	KAEKAACAALAAGA-----AAGAAVNG	464
tr	A0A0B4LFX4	A0A0B4LFX4_DROME	KAEKAACAALAAGA-----AAGAAVNG	474
tr	A0A0B4LG23	A0A0B4LG23_DROME	KAEKAACAALAAGA-----AAGAAVNG	464
	GCXY01047324.1,		-----	343
	GCXY01047324.2,		-----	0

tr W4VRQ9 W4VRQ9_9DIPT	DVKKDGKDEI-----VNGNNAAQ	467
tr S4NVH6 S4NVH6_9NEOP	-----	81
tr S4P6G9 S4P6G9_9NEOP	-----	119
tr S4PZT5 S4PZT5_9NEOP	-----	73
tr B1GS95 B1GS95_COTCN	-----	126
tr G1K0N0 G1K0N0_RHOPR	-----	114
tr A0A0L7KHN0 A0A0L7KHN0_9NEOP	-----	279
tr A0A0L7L3N5 A0A0L7L3N5_9NEOP	VDPKTGNILLLSGVIDPRTNKLDSGLGQYSIVDKPTDTFGALPGKEVQVVAITGKYDSK	685
tr A0A212EJP2 A0A212EJP2_DANPL	VDPKTGNILLLSGVIDPRTGQLDTTLGQYSIVDKPTVNFASLPGREVQVVAITGKYDAK	1014

sp Q9V8R9 EPB41_DROME	NDELNDSNK-----SDKSSGRR	481
tr A0A0B4LFX4 A0A0B4LFX4_DROME	NDELNDSNK-----SDKSSGRR	491
tr A0A0B4LG23 A0A0B4LG23_DROME	NDELNDSNK-----SDKSSGRR	481
GCXY01047324.1,	-----	343
GCXY01047324.2,	-----	0
tr W4VRQ9 W4VRQ9_9DIPT	NDTLNSSTE-----SKSPPGKR	484
tr S4NVH6 S4NVH6_9NEOP	-----	81
tr S4P6G9 S4P6G9_9NEOP	-----	119
tr S4PZT5 S4PZT5_9NEOP	-----	73
tr B1GS95 B1GS95_COTCN	-----	126
tr G1K0N0 G1K0N0_RHOPR	-----	114
tr A0A0L7KHN0 A0A0L7KHN0_9NEOP	-----	279
tr A0A0L7L3N5 A0A0L7L3N5_9NEOP	NKKLDNPNPFGVETSQGIISDKDGKVHTNFGVLDPNTGKIHYPDKTGKRDQSKQANIDPKT	745
tr A0A212EJP2 A0A212EJP2_DANPL	NKKLDNPNPFGVETSQAIIVSDKDSKVHTNFGILDPNSGKIYYTDPKTGKRDQSKQALLDPKN	1074

sp Q9V8R9 EPB41_DROME	GVGIFSSGRKSKSGSPS-----KDGKD-KSGKDKDKEVGRLGLV-VTSGLGDNQQD	530
tr A0A0B4LFX4 A0A0B4LFX4_DROME	GVGIFSSGRKSKSGSPS-----KDGKD-KSGKDKDKEVGRLGLV-VTSGLGDNQQD	540
tr A0A0B4LG23 A0A0B4LG23_DROME	GVGIFSSGRKSKSGSPS-----KDGKD-KSGKDKDKEVGRLGLV-VTSGLGDNQQD	530
GCXY01047324.1,	-----	343
GCXY01047324.2,	-----	0
tr W4VRQ9 W4VRQ9_9DIPT	RGFLFSSGRKSPKEKAE-----KVEKLAKAGSKGDS---PTKDT-VAAAAGDKQKQ	531
tr S4NVH6 S4NVH6_9NEOP	-----	81
tr S4P6G9 S4P6G9_9NEOP	-----	119
tr S4PZT5 S4PZT5_9NEOP	-----	73
tr B1GS95 B1GS95_COTCN	-----	126
tr G1K0N0 G1K0N0_RHOPR	-----	114
tr A0A0L7KHN0 A0A0L7KHN0_9NEOP	-----	279
tr A0A0L7L3N5 A0A0L7L3N5_9NEOP	GSFILTSVIDPKTGKADSSLAQQLAVVDKDPKGIP---ER-LANLVIIVTAKYDPKSKK	801
tr A0A212EJP2 A0A212EJP2_DANPL	GSLLLLTTGVIDPKTGKTDSSLAQQLTVVDKDPQGIR---ER-QVNLVIIVTSKYDLKNKK	1130

sp Q9V8R9 EPB41_DROME	QNL-----	533
tr A0A0B4LFX4 A0A0B4LFX4_DROME	QNL-----	543
tr A0A0B4LG23 A0A0B4LG23_DROME	QNL-----	533
GCXY01047324.1,	-----	343

GCXY01047324.2,	-----	0
tr W4VRQ9 W4VRQ9_9DIPT	KDK-----	534
tr S4NVH6 S4NVH6_9NEOP	-----	81
tr S4P6G9 S4P6G9_9NEOP	-----	119
tr S4PZT5 S4PZT5_9NEOP	-----	73
tr B1GS95 B1GS95_COTCN	-----	126
tr G1K0N0 G1K0N0_RHOPR	-----	114
tr A0A0L7KHN0 A0A0L7KHN0_9NEOP	-----	279
tr A0A0L7L3N5 A0A0L7L3N5_9NEOP	LDVTNAHVDSVPGKYDDDD-KVHSAFGIVDPSTGEIIVTDPISGKQEVKKSSIDPKTGNL	860
tr A0A212EJP2 A0A212EJP2_DANPL	LDLTNPHTINTVT-----	1142
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sp Q9V8R9 EPB41_DROME	-----D-----	534
tr A0A0B4LFX4 A0A0B4LFX4_DROME	-----D-----	544
tr A0A0B4LG23 A0A0B4LG23_DROME	-----D-----	534
GCXY01047324.1,	-----	343
GCXY01047324.2,	-----	0
tr W4VRQ9 W4VRQ9_9DIPT	-----EKEKDKTKPV-----	544
tr S4NVH6 S4NVH6_9NEOP	-----	81
tr S4P6G9 S4P6G9_9NEOP	-----	119
tr S4PZT5 S4PZT5_9NEOP	-----	73
tr B1GS95 B1GS95_COTCN	-----	126
tr G1K0N0 G1K0N0_RHOPR	-----	114
tr A0A0L7KHN0 A0A0L7KHN0_9NEOP	-----	279
tr A0A0L7L3N5 A0A0L7L3N5_9NEOP	LLTSGVIDPRTGQHDSLGGQITVIDPKPKDRFAAVPGKEVQLVIITSKYDSKYKRLDNPN	920
tr A0A212EJP2 A0A212EJP2_DANPL	-----	1142

sp Q9V8R9 EPB41_DROME	-----	534
tr A0A0B4LFX4 A0A0B4LFX4_DROME	-----	544
tr A0A0B4LG23 A0A0B4LG23_DROME	-----	534
GCXY01047324.1,	-----	343
GCXY01047324.2,	-----	0
tr W4VRQ9 W4VRQ9_9DIPT	-----	544
tr S4NVH6 S4NVH6_9NEOP	-----	81
tr S4P6G9 S4P6G9_9NEOP	-----	119
tr S4PZT5 S4PZT5_9NEOP	-----	73
tr B1GS95 B1GS95_COTCN	-----	126
tr G1K0N0 G1K0N0_RHOPR	-----	114
tr A0A0L7KHN0 A0A0L7KHN0_9NEOP	-----	279
tr A0A0L7L3N5 A0A0L7L3N5_9NEOP	GHVECSRGI VSSDGKVHTNFGVIDPRTGKVEYVDPKTGKQEI KQAVADPKTGHLIISSGV	980
tr A0A212EJP2 A0A212EJP2_DANPL	-----	1142

sp Q9V8R9 EPB41_DROME	-----EAARNA-----	540
tr A0A0B4LFX4 A0A0B4LFX4_DROME	-----EAARNA-----	550
tr A0A0B4LG23 A0A0B4LG23_DROME	-----EAARNA-----	540

GCXY01047324.1,	-----	343
GCXY01047324.2,	-----	0
tr W4VRQ9 W4VRQ9_9DIPT	-----AVGVDIK-----	551
tr S4NVH6 S4NVH6_9NEOP	-----	81
tr S4P6G9 S4P6G9_9NEOP	-----	119
tr S4PZT5 S4PZT5_9NEOP	-----	73
tr B1GS95 B1GS95_COTCN	-----	126
tr G1K0N0 G1K0N0_RHOPR	-----	114
tr A0A0L7KHN0 A0A0L7KHN0_9NEOP	-----	279
tr A0A0L7L3N5 A0A0L7L3N5_9NEOP	ADPKTGKTDSSLAQQLTIVDRDSKGAPEKLVNLVIVTAKYDVKNKKLDLANAHVDITPGK	1040
tr A0A212EJP2 A0A212EJP2_DANPL	-----	1142

sp Q9V8R9 EPB41_DROME	---AK-----	542
tr A0A0B4LFX4 A0A0B4LFX4_DROME	---AK-----	552
tr A0A0B4LG23 A0A0B4LG23_DROME	---AK-----	542
GCXY01047324.1,	-----	343
GCXY01047324.2,	-----	0
tr W4VRQ9 W4VRQ9_9DIPT	---VD-----	553
tr S4NVH6 S4NVH6_9NEOP	-----	81
tr S4P6G9 S4P6G9_9NEOP	-----	119
tr S4PZT5 S4PZT5_9NEOP	-----	73
tr B1GS95 B1GS95_COTCN	-----	126
tr G1K0N0 G1K0N0_RHOPR	-----	114
tr A0A0L7KHN0 A0A0L7KHN0_9NEOP	-----	279
tr A0A0L7L3N5 A0A0L7L3N5_9NEOP	IG-ADDKVHTAFGVDPNTGDI VVTD PITGKQEIKKASLDPKTGNLLLTSSVVDPLSGQV	1099
tr A0A212EJP2 A0A212EJP2_DANPL	-----	1142
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sp Q9V8R9 EPB41_DROME	-----	542
tr A0A0B4LFX4 A0A0B4LFX4_DROME	-----	552
tr A0A0B4LG23 A0A0B4LG23_DROME	-----	542
GCXY01047324.1,	-----	343
GCXY01047324.2,	-----	0
tr W4VRQ9 W4VRQ9_9DIPT	-----	553
tr S4NVH6 S4NVH6_9NEOP	-----	81
tr S4P6G9 S4P6G9_9NEOP	-----	119
tr S4PZT5 S4PZT5_9NEOP	-----	73
tr B1GS95 B1GS95_COTCN	-----	126
tr G1K0N0 G1K0N0_RHOPR	-----	114
tr A0A0L7KHN0 A0A0L7KHN0_9NEOP	-----	279
tr A0A0L7L3N5 A0A0L7L3N5_9NEOP	DPTLGQQISVVDPKPKDRFATVPGKEVQLVVITSKYDPKNKRLDNPNGYVEVSRGIIAP-D	1158
tr A0A212EJP2 A0A212EJP2_DANPL	-----	1142
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sp Q9V8R9 EPB41_DROME	-----NRGSTTPGVT	552
tr A0A0B4LFX4 A0A0B4LFX4_DROME	-----NRGSTTPGVT	562

tr A0A0B4LG23 A0A0B4LG23_DROME	-----NRGSTTPGVT	552
GCXY01047324.1,	-----	343
GCXY01047324.2,	-----	0
tr W4VRQ9 W4VRQ9_9DIPT	-----EKQQKPSVT	563
tr S4NVH6 S4NVH6_9NEOP	-----	81
tr S4P6G9 S4P6G9_9NEOP	-----	119
tr S4PZT5 S4PZT5_9NEOP	-----	73
tr B1GS95 B1GS95_COTCN	-----	126
tr G1K0N0 G1K0N0_RHOPR	-----	114
tr A0A0L7KHN0 A0A0L7KHN0_9NEOP	-----	279
tr A0A0L7L3N5 A0A0L7L3N5_9NEOP	GRIHTNFGIVDTKTGKIDQIDPRTGKSETKQASTDSKTGHLFITSGVIDPKTGKTDPSLA	1218
tr A0A212EJP2 A0A212EJP2_DANPL	-----	1142

sp Q9V8R9 EPB41_DROME	RQYEYAVDNDGNTSPTRKSY-----TPGGFRYD-----	580
tr A0A0B4LFX4 A0A0B4LFX4_DROME	RQYEYAVDNDGNTSPTRKSY-----TPGGFRYD-----	590
tr A0A0B4LG23 A0A0B4LG23_DROME	RQYEYAVDNDGNTSPTRKSY-----TPGGFRYD-----	580
GCXY01047324.1,	-----	343
GCXY01047324.2,	-----	0
tr W4VRQ9 W4VRQ9_9DIPT	KPYEYQE-QDPNTSPTKKNY-----VKGGFKYD-----	590
tr S4NVH6 S4NVH6_9NEOP	-----	81
tr S4P6G9 S4P6G9_9NEOP	-----	119
tr S4PZT5 S4PZT5_9NEOP	-----	73
tr B1GS95 B1GS95_COTCN	-----	126
tr G1K0N0 G1K0N0_RHOPR	-----	114
tr A0A0L7KHN0 A0A0L7KHN0_9NEOP	-----	279
tr A0A0L7L3N5 A0A0L7L3N5_9NEOP	QQFAVVDKDAPR-----ERYVNLVIVTSKYDLKNKKLDLANAHVDITPGKVGADGNVHTE	1273
tr A0A212EJP2 A0A212EJP2_DANPL	-----GTIDDNDKVHTE	1154

sp Q9V8R9 EPB41_DROME	-----QDPNSRKS-----GAD---G-----QEQLSPTSQ-----Q	602
tr A0A0B4LFX4 A0A0B4LFX4_DROME	-----QDPNSRKS-----GAD---G-----QEQLSPTSQ-----Q	612
tr A0A0B4LG23 A0A0B4LG23_DROME	-----QDPNSRKS-----GAD---G-----QEQLSPTSQ-----Q	602
GCXY01047324.1,	-----	343
GCXY01047324.2,	-----	0
tr W4VRQ9 W4VRQ9_9DIPT	-----EDPNLRNK-----TND-----EQLSPNSQ-----TR	611
tr S4NVH6 S4NVH6_9NEOP	-----	81
tr S4P6G9 S4P6G9_9NEOP	-----	119
tr S4PZT5 S4PZT5_9NEOP	-----	73
tr B1GS95 B1GS95_COTCN	-----	126
tr G1K0N0 G1K0N0_RHOPR	-----	114
tr A0A0L7KHN0 A0A0L7KHN0_9NEOP	-----	279
tr A0A0L7L3N5 A0A0L7L3N5_9NEOP	FGVVDPTGDIITDPVTGKRETKKASVDPKTNLVLTSGVVDPTGQVDPTLAQQMSVV	1333
tr A0A212EJP2 A0A212EJP2_DANPL	LGIIDPATGQITITDPVSGKQEVKKATVDSKTGNMLLTSGVIDPNTGVVDPTLGQQYSVV	1214

sp Q9V8R9 EPB41_DROME	KKIGLAFNYAPGNENALKETAELKA-----GQLSPRTQDKLNRGQLSP	646
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tr A0A0B4LFX4 A0A0B4LFX4_DROME	KKIGLAFNYAPGNENALKETAEKLKA-----GQLSPRTQDKLNRGQLSP	656
tr A0A0B4LG23 A0A0B4LG23_DROME	KKIGLAFNYAPGNENALKETAEKLKA-----GQLSPRTQDKLNRGQLSP	646
GCXY01047324.1,	-----	343
GCXY01047324.2,	-----	0
tr W4VRQ9 W4VRQ9_9DIPT	RATGLAFNYAPGEEKNLRESIEKRKS-----P-----EELSP	643
tr S4NVH6 S4NVH6_9NEOP	-----	81
tr S4P6G9 S4P6G9_9NEOP	-----	119
tr S4PZT5 S4PZT5_9NEOP	-----	73
tr B1GS95 B1GS95_COTCN	-----	126
tr G1K0N0 G1K0N0_RHOPR	-----	114
tr A0A0L7KHN0 A0A0L7KHN0_9NEOP	-----	279
tr A0A0L7L3N5 A0A0L7L3N5_9NEOP	DKPKDSFKSVPGREVQLVIITCKYDAKNKKLDNPNNGHIETSRGIIAADGRVHTNYGIIDP	1393
tr A0A212EJP2 A0A212EJP2_DANPL	NKPKDTFASIPGKEVQLVIITNKYDHKYKRLDNPNGHIETSRGIVAADGRVHSNFGILD	1274

sp Q9V8R9 EPB41_DROME	KS-----RAKLLQDPLLSPTTTRAKL----QGS AVDA	673
tr A0A0B4LFX4 A0A0B4LFX4_DROME	KS-----RAKLLQDPLLSPTTTRAKL----QGS AVDA	683
tr A0A0B4LG23 A0A0B4LG23_DROME	KS-----RAKLLQDPLLSPTTTRAKL----QGS AVDA	673
GCXY01047324.1,	-----	343
GCXY01047324.2,	-----	0
tr W4VRQ9 W4VRQ9_9DIPT	KS-----KEKFLKGGNLSPKSANKF----ITTDVES	670
tr S4NVH6 S4NVH6_9NEOP	-----	81
tr S4P6G9 S4P6G9_9NEOP	-----	119
tr S4PZT5 S4PZT5_9NEOP	-----	73
tr B1GS95 B1GS95_COTCN	-----	126
tr G1K0N0 G1K0N0_RHOPR	-----	114
tr A0A0L7KHN0 A0A0L7KHN0_9NEOP	-----	279
tr A0A0L7L3N5 A0A0L7L3N5_9NEOP	KSGKIEHIDPKTGKTEVKHATADPGLGFKPGTLILTSGVVDPQTGKVDSSLAQQLTIVEK	1453
tr A0A212EJP2 A0A212EJP2_DANPL	KTGKIEKVDPVTGNSDVKNAIADP---KTGHLILTSGVVDPKTGKVDTSLAQQINIVDK	1330

sp Q9V8R9 EPB41_DROME	AAVPL-----SDSQKRSYSPTKGPQGYSSGAPGS-----YKPI----	706
tr A0A0B4LFX4 A0A0B4LFX4_DROME	AAVPL-----SDSQKRSYSPTKGPQGYSSGAPGS-----YKPI----	716
tr A0A0B4LG23 A0A0B4LG23_DROME	AAVPL-----SDSQKRSYSPTKGPQGYSSGAPGS-----YKPI----	706
GCXY01047324.1,	-----	343
GCXY01047324.2,	-----	0
tr W4VRQ9 W4VRQ9_9DIPT	E---K-----AKATGKSYSPNSGKPIETPGTPGT-----YRSL-----	700
tr S4NVH6 S4NVH6_9NEOP	-----	81
tr S4P6G9 S4P6G9_9NEOP	-----	119
tr S4PZT5 S4PZT5_9NEOP	-----	73
tr B1GS95 B1GS95_COTCN	-----	126
tr G1K0N0 G1K0N0_RHOPR	-----	114
tr A0A0L7KHN0 A0A0L7KHN0_9NEOP	-----	279
tr A0A0L7L3N5 A0A0L7L3N5_9NEOP	ETKPVEREIH LVIITTKYDPRTKKIDPSQGHVDVTGT L GPDGKIRTA VGII DPATGEIL	1513
tr A0A212EJP2 A0A212EJP2_DANPL	NAKPVEREIH LVIITTKYDPRTKKIDPTQGTVDTVSGTVGPDGKIRTEFGTVDPATGEIT	1390

sp Q9V8R9 EPB41_DROME	-SDP-----TADFLES----	716
tr A0A0B4LFX4 A0A0B4LFX4_DROME	-SDP-----TADFLES----	726
tr A0A0B4LG23 A0A0B4LG23_DROME	-SDP-----TADFLES----	716
GCXY01047324.1,	-----	343
GCXY01047324.2,	-----	0
tr W4VRQ9 W4VRQ9_9DIPT	-GDQ-----SKPAATE-----	710
tr S4NVH6 S4NVH6_9NEOP	-----	81
tr S4P6G9 S4P6G9_9NEOP	-----	119
tr S4PZT5 S4PZT5_9NEOP	-----	73
tr B1GS95 B1GS95_COTCN	-----	126
tr G1K0N0 G1K0N0_RHOPR	-----	114
tr A0A0L7KHN0 A0A0L7KHN0_9NEOP	-----	279
tr A0A0L7L3N5 A0A0L7L3N5_9NEOP	VTDPKTGKSEIKKADLNPATGHMVISSQVVDPKTGKVDPTLVQQFSIVNKPVVAHPKPAS	1573
tr A0A212EJP2 A0A212EJP2_DANPL	FTDPKTGKQDIKKAQVDPSTGHMLVTSQVVDPKTGKVDPTLAQQYSIVNKPVVAHAKPPA	1450

sp Q9V8R9 EPB41_DROME	-----QRYNKEPGYVGPS-----	729
tr A0A0B4LFX4 A0A0B4LFX4_DROME	-----QRYNKEPGYVGPS-----	739
tr A0A0B4LG23 A0A0B4LG23_DROME	-----QRYNKEPGYVGPS-----	729
GCXY01047324.1,	-----	343
GCXY01047324.2,	-----	0
tr W4VRQ9 W4VRQ9_9DIPT	-----QKPQQQQ-----	717
tr S4NVH6 S4NVH6_9NEOP	-----	81
tr S4P6G9 S4P6G9_9NEOP	-----	119
tr S4PZT5 S4PZT5_9NEOP	-----	73
tr B1GS95 B1GS95_COTCN	-----	126
tr G1K0N0 G1K0N0_RHOPR	-----	114
tr A0A0L7KHN0 A0A0L7KHN0_9NEOP	-----	279
tr A0A0L7L3N5 A0A0L7L3N5_9NEOP	KGEVRLVIVTISKYDPYTKTVDANSGTVDAAGYVSAEDGKIHTDFGIIDPRSGQILYKDP	1633
tr A0A212EJP2 A0A212EJP2_DANPL	KGEVRLVIITSKFDPKSKTVDAGAGTVDASKGYVSAEDGKIHTDFGIIDPKSGQILFKDP	1510

sp Q9V8R9 EPB41_DROME	-----KADVAAGLAG-----	739
tr A0A0B4LFX4 A0A0B4LFX4_DROME	-----KADVAAGLAG-----	749
tr A0A0B4LG23 A0A0B4LG23_DROME	-----KADVAAGLAG-----	739
GCXY01047324.1,	-----	343
GCXY01047324.2,	-----	0
tr W4VRQ9 W4VRQ9_9DIPT	-----QQPAGGLV-----	725
tr S4NVH6 S4NVH6_9NEOP	-----	81
tr S4P6G9 S4P6G9_9NEOP	-----	119
tr S4PZT5 S4PZT5_9NEOP	-----	73
tr B1GS95 B1GS95_COTCN	-----	126
tr G1K0N0 G1K0N0_RHOPR	-----	114
tr A0A0L7KHN0 A0A0L7KHN0_9NEOP	-----	279
tr A0A0L7L3N5 A0A0L7L3N5_9NEOP	LTGKQELKQAEIDPKTRNLIVTTAVVDPATGKVDQSFAQQLTIVDKQNVLKPVPPPISQR	1693
tr A0A212EJP2 A0A212EJP2_DANPL	VTGKQELKQADIDPKTGHITVTSSVVDPKTGKVDSSFAQQLVIVDKQNVMAKVVP---QR	1567

sp Q9V8R9 EPB41_DROME	--AAGSKKPGSPTKTGKGAPGA-----AAAAAGAAGA	770
tr A0A0B4LFX4 A0A0B4LFX4_DROME	--AAGSKKPGSPTKTGKGAPGA-----AAAAAGAAGA	780
tr A0A0B4LG23 A0A0B4LG23_DROME	--AAGSKKPGSPTKTGKGAPGA-----AAAAAGAAGA	770
GCXY01047324.1,	-----	343
GCXY01047324.2,	-----	0
tr W4VRQ9 W4VRQ9_9DIPT	-----TKIDPNA-----AFIAGEQFAAN	743
tr S4NVH6 S4NVH6_9NEOP	-----	81
tr S4P6G9 S4P6G9_9NEOP	-----	119
tr S4PZT5 S4PZT5_9NEOP	-----	73
tr B1GS95 B1GS95_COTCN	-----	126
tr G1K0N0 G1K0N0_RHOPR	-----	114
tr A0A0L7KHN0 A0A0L7KHN0_9NEOP	-----	279
tr A0A0L7L3N5 A0A0L7L3N5_9NEOP	VSVSPAKQVPSVKTPPTPTQTPLQSPVRTSSPIISSFAKSSPLSPVHKTTTPVKPTMA	1753
tr A0A212EJP2 A0A212EJP2_DANPL	ASASPARQTPSPIKTPNTTPVHTPLQTPVRTTAPVIGHLQKASPVT-PVRAVTPAKPTSA	1626

sp Q9V8R9 EPB41_DROME	AAAAAKPKRRVKIMVITSKFDPSTKRID-AENGSIHSTG-ILDPATGLIDTKYGVIDP	828
tr A0A0B4LFX4 A0A0B4LFX4_DROME	AAAAAKPKRRVKIMVITSKFDPSTKRID-AENGSIHSTG-ILDPATGLIDTKYGVIDP	838
tr A0A0B4LG23 A0A0B4LG23_DROME	AAAAAKPKRRVKIMVITSKFDPSTKRID-AENGSIHSTG-ILDPATGLIDTKYGVIDP	828
GCXY01047324.1,	-----	343
GCXY01047324.2,	-----	0
tr W4VRQ9 W4VRQ9_9DIPT	VPPAAEPLKKKVKIMVVISKIDPKTKRIVDTSNGTVEHSTG-VLDTSTGQIESKYGLIDP	802
tr S4NVH6 S4NVH6_9NEOP	-----	81
tr S4P6G9 S4P6G9_9NEOP	-----	119
tr S4PZT5 S4PZT5_9NEOP	-----	73
tr B1GS95 B1GS95_COTCN	-----	126
tr G1K0N0 G1K0N0_RHOPR	-----	114
tr A0A0L7KHN0 A0A0L7KHN0_9NEOP	-----	279
tr A0A0L7L3N5 A0A0L7L3N5_9NEOP	PPEPPTPKRKIVKIMVIFTKIDPKSKKPD-LHTAEVEHLTG-ILDP-NGQIETKYGVINS	1810
tr A0A212EJP2 A0A212EJP2_DANPL	PPEP--PRRKVMKIMIIFTRLDPKTKKPD-FVTADVEHLAG-VLDP-NGLVETKYGVIDT	1681

*

sp Q9V8R9 EPB41_DROME	KKGTLEALNTKTGKKEVFQG---DVDGKTG-NLHLVSGVADPKTGRLDDTLG-QIVCIT	882
tr A0A0B4LFX4 A0A0B4LFX4_DROME	KKGTLEALNTKTGKKEVFQG---DVDGKTG-NLHLVSGVADPKTGRLDDTLG-QIVCIT	892
tr A0A0B4LG23 A0A0B4LG23_DROME	KKGTLEALNTKTGKKEVFQG---DVDGKTG-NLHLVSGVADPKTGRLDDTLG-QIVCIT	882
GCXY01047324.1,	-----	343
GCXY01047324.2,	-----	0
tr W4VRQ9 W4VRQ9_9DIPT	KAGTVQNLNPRTGQNEVFQG---HTDPKTG-HIYLTSGVQDPNPNPSKIDDTLGQIISIA	857
tr S4NVH6 S4NVH6_9NEOP	-----	81
tr S4P6G9 S4P6G9_9NEOP	-----	119
tr S4PZT5 S4PZT5_9NEOP	-----	73
tr B1GS95 B1GS95_COTCN	-----	126
tr G1K0N0 G1K0N0_RHOPR	-----	114
tr A0A0L7KHN0 A0A0L7KHN0_9NEOP	-----	279
tr A0A0L7L3N5 A0A0L7L3N5_9NEOP	RTGHIVITD-QAGQKQTKEGYLLSETG----QIFINSVIDPKTGKIDP-HLGMIMSVA	1863
tr A0A212EJP2 A0A212EJP2_DANPL	KKGNIVVTD-SAGQKLTkdGLILNETG----QIFINSGAIDPKTGKIDP-NMGMIVSMA	1734

sp Q9V8R9 EPB41_DROME	PQDNPVVELTVITSRIDPATGKIDTVNGDVERS LGVLNLDTGLLDTKYGEINTRTGELKA	942
tr A0A0B4LFX4 A0A0B4LFX4_DROME	PQDNPVVELTVITSRIDPATGKIDTVNGDVERS LGVLNLDTGLLDTKYGEINTRTGELKA	952
tr A0A0B4LG23 A0A0B4LG23_DROME	PQDNPVVELTVITSRIDPATGKIDTVNGDVERS LGVLNLDTGLLDTKYGEINTRTGELKA	942
GCXY01047324.1,	-----	343
GCXY01047324.2,	-----	0
tr W4VRQ9 W4VRQ9_9DIPT	PDDQSIVEVTTITSKLDPQTGKVDHVNGDVERTRGILNTKTGIKTKYGDINTKTGEVKV	917
tr S4NVH6 S4NVH6_9NEOP	-----	81
tr S4P6G9 S4P6G9_9NEOP	-----	119
tr S4PZT5 S4PZT5_9NEOP	-----	73
tr B1GS95 B1GS95_COTCN	-----	126
tr G1K0N0 G1K0N0_RHOPR	-----	114
tr A0A0L7KHN0 A0A0L7KHN0_9NEOP	-----	279
tr A0A0L7L3N5 A0A0L7L3N5_9NEOP	KQDDPVVEITTTITGPINERTGKVNIEEGTVELTKGKVDADTGHISTKYGVIDPSN--GVI	1921
tr A0A212EJP2 A0A212EJP2_DANPL	KQDDPVVEITTTITGPVDAVTGKIHIENGVEHTKGKVD AETGNISTKYGVIDPAN--GVI	1792

sp Q9V8R9 EPB41_DROME	IDPKSGKIVVSKNVKVDPGTGQITILGIVDPKTNKIDPNQGRLIEVGQQIDPIVEVTS LA	1002
tr A0A0B4LFX4 A0A0B4LFX4_DROME	IDPKSGKIVVSKNVKVDPGTGQITILGIVDPKTNKIDPNQGRLIEVGQQIDPIVEVTS LA	1012
tr A0A0B4LG23 A0A0B4LG23_DROME	IDPKSGKIVVSKNVKVDPGTGQITILGIVDPKTNKIDPNQGRLIEVGQQIDPIVEVTS LA	1002
GCXY01047324.1,	-----	343
GCXY01047324.2,	-----	0
tr W4VRQ9 W4VRQ9_9DIPT	TDPKTHKIVSKDGKLDKVS G-QIQTIGVADPKSNKIDPNQAHLVAIGNQIDPVVEVTSVL	976
tr S4NVH6 S4NVH6_9NEOP	-----	81
tr S4P6G9 S4P6G9_9NEOP	-----	119
tr S4PZT5 S4PZT5_9NEOP	-----	73
tr B1GS95 B1GS95_COTCN	-----	126
tr G1K0N0 G1K0N0_RHOPR	-----	114
tr A0A0L7KHN0 A0A0L7KHN0_9NEOP	-----	279
tr A0A0L7L3N5 A0A0L7L3N5_9NEOP	FVSDTS---DTKPVEIDENNGQITIRGVVDPKTAKYDANLGQVIVVGTHIDPVVEVTTFV	1978
tr A0A212EJP2 A0A212EJP2_DANPL	FVTDLTGTQDAKSIQIDENNGQITVIGVTDPKTGKIDPKLGQVLVVGSHIDPVVEVTTFV	1852

sp Q9V8R9 EPB41_DROME	GKFDSKRNIIDPKTAQVETSGGQFDPKAGKIDTKYGQIDLVKHTITFNDPKSGKTVTRDI	1062
tr A0A0B4LFX4 A0A0B4LFX4_DROME	GKFDSKRNIIDPKTAQVETSGGQFDPKAGKIDTKYGQIDLVKHTITFNDPKSGKTVTRDI	1072
tr A0A0B4LG23 A0A0B4LG23_DROME	GKFDSKRNIIDPKTAQVETSGGQFDPKAGKIDTKYGQIDLVKHTITFNDPKSGKTVTRDI	1062
GCXY01047324.1,	-----	343
GCXY01047324.2,	-----	0
tr W4VRQ9 W4VRQ9_9DIPT	GKIDKKGVVDP-KTISYDKSTGQLDTENGKINTKFGQLDLNKQTLTYVDPKSGKTETKDV	1035
tr S4NVH6 S4NVH6_9NEOP	-----	81
tr S4P6G9 S4P6G9_9NEOP	-----	119
tr S4PZT5 S4PZT5_9NEOP	-----	73
tr B1GS95 B1GS95_COTCN	-----	126
tr G1K0N0 G1K0N0_RHOPR	-----	114
tr A0A0L7KHN0 A0A0L7KHN0_9NEOP	-----	279
tr A0A0L7L3N5 A0A0L7L3N5_9NEOP	GKVDSKKGLIEPKHSLIESTTGQFN PENNKIDTKYGQIDLVKGTVTYNDPKTGKFESRDL	2038

tr A0A212EJP2 A0A212EJP2_DANPL	GKLDNKKGIIEPKHSVIESTTGQLNPDNNIINTKYGQIDLVKGTVTYNDPKTGRFESKEF	1912
sp Q9V8R9 EPB41_DROME	KIEPTTGQIVLK----NQVNPKNKPKDKDYARIISLRIVQQRVDPATKAPITEVSASKDK	1118
tr A0A0B4LFX4 A0A0B4LFX4_DROME	KIEPTTGQIVLK----NQVNPKNKPKDKDYARIISLRIVQQRVDPATKAPITEVSASKDK	1128
tr A0A0B4LG23 A0A0B4LG23_DROME	KIEPTTGQIVLK----NQVNPKNKPKDKDYARIISLRIVQQRVDPATKAPITEVSASKDK	1118
GCXY01047324.1,	-----	343
GCXY01047324.2,	-----	0
tr W4VRQ9 W4VRQ9_9DIPT	KVDPTTGQITLK----NQINPKTNKPKDKDFGRIISIRIVQNRIDPVSGKQISN---IVDK	1088
tr S4NVH6 S4NVH6_9NEOP	-----	81
tr S4P6G9 S4P6G9_9NEOP	-----	119
tr S4PZT5 S4PZT5_9NEOP	-----	73
tr B1GS95 B1GS95_COTCN	-----	126
tr G1K0N0 G1K0N0_RHOPR	-----	114
tr A0A0L7KHN0 A0A0L7KHN0_9NEOP	-----	279
tr A0A0L7L3N5 A0A0L7L3N5_9NEOP	KVDPVTGQFLLR---TGQVNPKSGKPKDKDIGRLICLRIIRNKVDPISGKQIVS---NDPK	2092
tr A0A212EJP2 A0A212EJP2_DANPL	KVDPVTGQFLLR---SGQVNPKSGKPKDKDIGRLICLRIIQTKVDPVSGKQIVS---NDPK	1966

sp Q9V8R9 EPB41_DROME	DIVVDPKS----NQIWVPTGATDPATKEQQYISSSVDPKTGYVITIYGYLDPKTNEIKKQ	1174
tr A0A0B4LFX4 A0A0B4LFX4_DROME	DIVVDPKS----NQIWVPTGATDPATKEQQYISSSVDPKTGYVITIYGYLDPKTNEIKKQ	1184
tr A0A0B4LG23 A0A0B4LG23_DROME	DIVVDPKS----NQIWVPTGATDPATKEQQYISSSVDPKTGYVITIYGYLDPKTNEIKKQ	1174
GCXY01047324.1,	-----	343
GCXY01047324.2,	-----	0
tr W4VRQ9 W4VRQ9_9DIPT	DIKVDPKTN---QIWL PDS-KDPKSGETIYSTSQVDPKTGYVITIYGYLNPKTNEIEKQ	1143
tr S4NVH6 S4NVH6_9NEOP	-----	81
tr S4P6G9 S4P6G9_9NEOP	-----	119
tr S4PZT5 S4PZT5_9NEOP	-----	73
tr B1GS95 B1GS95_COTCN	-----	126
tr G1K0N0 G1K0N0_RHOPR	-----	114
tr A0A0L7KHN0 A0A0L7KHN0_9NEOP	-----	279
tr A0A0L7L3N5 A0A0L7L3N5_9NEOP	NVKVDPKT----NQIWIAG-PKDPQTGEVLYTAGQIDPITGYIITIYGRLDPKTGVIVRT	2147
tr A0A212EJP2 A0A212EJP2_DANPL	NVKVDPKT----NQIWIAG-PKDPQTGEVLYTAGQIDPNTGYIITIYGRLDPKTGTITRA	2021

sp Q9V8R9 EPB41_DROME	TKLDPNTIKIEPTSGKIYTATGEVDQATGEPLYAATQVDPESGEVYTKLARVDPKTGKIV	1234
tr A0A0B4LFX4 A0A0B4LFX4_DROME	TKLDPNTIKIEPTSGKIYTATGEVDQATGEPLYAATQVDPESGEVYTKLARVDPKTGKIV	1244
tr A0A0B4LG23 A0A0B4LG23_DROME	TKLDPNTIKIEPTSGKIYTATGEVDQATGEPLYAATQVDPESGEVYTKLARVDPKTGKIV	1234
GCXY01047324.1,	-----	343
GCXY01047324.2,	-----	0
tr W4VRQ9 W4VRQ9_9DIPT	TKLDPNLTKVDPTNGQIYSATGQVDEKTGEPLFATSEINDETGEIYTKVGKVDPKTGKLV	1203
tr S4NVH6 S4NVH6_9NEOP	-----	81
tr S4P6G9 S4P6G9_9NEOP	-----	119
tr S4PZT5 S4PZT5_9NEOP	-----	73
tr B1GS95 B1GS95_COTCN	-----	126
tr G1K0N0 G1K0N0_RHOPR	-----	114
tr A0A0L7KHN0 A0A0L7KHN0_9NEOP	-----	279

tr A0A0L7L3N5 A0A0L7L3N5_9NEOP	TEVDKSLIKVDPVNGQIYTATGEVDENN-EPLYSASQVDPGTGEIYTKLGKIDARTGRLI	2206
tr A0A212EJP2 A0A212EJP2_DANPL	TDIDKALIKIDPINGQIYTATGDVDEDN-EPLYSASQVDPGSGEIYTKLGKIDPKTGKLI	2080
sp Q9V8R9 EPB41_DROME	IVRILLISKTDERGRPEEIDPSTCEIDPVSGRVLKFFNKTVVYVNMIDPVTGEIVQVDPN	1294
tr A0A0B4LFX4 A0A0B4LFX4_DROME	IVRILLISKTDERGRPEEIDPSTCEIDPVSGRVLKFFNKTVVYVNMIDPVTGEIVQVDPN	1304
tr A0A0B4LG23 A0A0B4LG23_DROME	IVRILLISKTDERGRPEEIDPSTCEIDPVSGRVLKFFNKTVVYVNMIDPVTGEIVQVDPN	1294
GCXY01047324.1,	-----	343
GCXY01047324.2,	-----	0
tr W4VRQ9 W4VRQ9_9DIPT	IIKIFILTKKDERGKPEEVDVNSCIDPESGKIRSIATKTVVYKMRDPITGETYKIDSN	1263
tr S4NVH6 S4NVH6_9NEOP	-----	81
tr S4P6G9 S4P6G9_9NEOP	-----	119
tr S4PZT5 S4PZT5_9NEOP	-----	73
tr B1GS95 B1GS95_COTCN	-----	126
tr G1K0N0 G1K0N0_RHOPR	-----	114
tr A0A0L7KHN0 A0A0L7KHN0_9NEOP	-----	279
tr A0A0L7L3N5 A0A0L7L3N5_9NEOP	IIKIFVITQKDDKGRVKEVDPKECTIDETTGRITTK--TVVLYQIIDPITGETIDVDPD	2264
tr A0A212EJP2 A0A212EJP2_DANPL	IIRIYVITQKDDKGRVKELDPKECTIDETTGRITTK--TVVYVQIIDPITGETIDVDPD	2138
sp Q9V8R9 EPB41_DROME	DPRFAGARTTVTHTMTLTGEIDPVTGRIKSEYGDIDPNTGDIDPATAVTDPVTGKLILNY	1354
tr A0A0B4LFX4 A0A0B4LFX4_DROME	DPRFAGARTTVTHTMTLTGEIDPVTGRIKSEYGDIDPNTGDIDPATAVTDPVTGKLILNY	1364
tr A0A0B4LG23 A0A0B4LG23_DROME	DPRFAGARTTVTHTMTLTGEIDPVTGRIKSEYGDIDPNTGDIDPATAVTDPVTGKLILNY	1354
GCXY01047324.1,	-----	343
GCXY01047324.2,	-----	0
tr W4VRQ9 W4VRQ9_9DIPT	DPSIAGARTTVTETMTLSGEIDPVTGRIKTEWGNIDPNTGDIDPETAIRDPVTGKLILNY	1323
tr S4NVH6 S4NVH6_9NEOP	-----	81
tr S4P6G9 S4P6G9_9NEOP	-----	119
tr S4PZT5 S4PZT5_9NEOP	-----	73
tr B1GS95 B1GS95_COTCN	-----	126
tr G1K0N0 G1K0N0_RHOPR	-----	114
tr A0A0L7KHN0 A0A0L7KHN0_9NEOP	-----	279
tr A0A0L7L3N5 A0A0L7L3N5_9NEOP	DPRLKGARTTVTQMTLSGKIDPVTGRIKTEYGDIDPDTGDIDPSTAVRDPVTGQLILHY	2324
tr A0A212EJP2 A0A212EJP2_DANPL	DPRLKGARTTVTQMTLSGKIDPITGRIKTEYGDIDPDTGDIDPSTAVRDPVTGQLILHY	2198
sp Q9V8R9 EPB41_DROME	AQIDPSHFGKQAQVQ-TTETVPITRQQFFDGV-----KHISKG-----ALRRDS	1398
tr A0A0B4LFX4 A0A0B4LFX4_DROME	AQIDPSHFGKQAQVQ-TTETVPITRQQFFDGV-----KHISKG-----ALRRDS	1408
tr A0A0B4LG23 A0A0B4LG23_DROME	AQIDPSHFGKQAQVQ-TTETVPITRQQFFDGV-----KHISKG-----ALRRDS	1398
GCXY01047324.1,	-----	343
GCXY01047324.2,	-----	0
tr W4VRQ9 W4VRQ9_9DIPT	ADIEPSHFG--KNVT-VTKETVPITKQQFYDGI-----KHLGKK-----AIRRDS	1365
tr S4NVH6 S4NVH6_9NEOP	-----	81
tr S4P6G9 S4P6G9_9NEOP	-----	119
tr S4PZT5 S4PZT5_9NEOP	-----	73
tr B1GS95 B1GS95_COTCN	-----	126
tr G1K0N0 G1K0N0_RHOPR	-----	114

tr A0A0L7KHN0 A0A0L7KHN0_9NEOP	-----	279
tr A0A0L7L3N5 A0A0L7L3N5_9NEOP	SQIDPSHFEDKSGNYTIEKETEDLPANIDIQTVNTHKFSTFGKDES-----PQRG--	2374
tr A0A212EJP2 A0A212EJP2_DANPL	SQIDPSHFEDKSGNYTIEKETHDLPANIDIQTVNTHKFSTFGKDES-----PARG--	2248

sp Q9V8R9 EPB41_DROME	EGSSDDDMTAQYGADQV-----NEILIGS--PAGQAGGKLGKPVSTPTVVKTTTKQV	1448
tr A0A0B4LFX4 A0A0B4LFX4_DROME	EGSSDDDMTAQYGADQV-----NEILIGS--PAGQAGGKLGKPVSTPTVVKTTTKQV	1458
tr A0A0B4LG23 A0A0B4LG23_DROME	EGSSDDDMTAQYGADQV-----NEILIGS--PAGQAGGKLGKPVSTPTVVKTTTKQV	1448
GCXY01047324.1,	-----	343
GCXY01047324.2,	-----	0
tr W4VRQ9 W4VRQ9_9DIPT	ETSDDETV--EYDVKEL-----SP-----TSAAGKQGTPTVVKTTTKQV	1402
tr S4NVH6 S4NVH6_9NEOP	-----	81
tr S4P6G9 S4P6G9_9NEOP	-----	119
tr S4PZT5 S4PZT5_9NEOP	-----	73
tr B1GS95 B1GS95_COTCN	-----	126
tr G1K0N0 G1K0N0_RHOPR	-----	114
tr A0A0L7KHN0 A0A0L7KHN0_9NEOP	-----	279
tr A0A0L7L3N5 A0A0L7L3N5_9NEOP	---DEPKTFTEYTTSEHIRHQGYVSSNTPLSSKIPISQ---RSKKTPTPPVVVKTTHKQL	2428
tr A0A212EJP2 A0A212EJP2_DANPL	---DEPKTFTEYTTSEHIRHQGYASS-TPISSKIPISQ---RSKKTPTPPVVVKTTHKQL	2301
sp Q9V8R9 EPB41_DROME	LTKNIDGVTHNVEEEVRNLGTGEVTYSTQEHKADATPT-D--LSGAYVTATAVTTTRTATT	1505
tr A0A0B4LFX4 A0A0B4LFX4_DROME	LTKNIDGVTHNVEEEVRNLGTGEVTYSTQEHK-----	1490
tr A0A0B4LG23 A0A0B4LG23_DROME	LTKNIDGVTHNVEEEVRNLGTGEVTYSTQEHKADATPT-D--LSGAYVTATAVTTTRTATT	1505
GCXY01047324.1,	-----	343
GCXY01047324.2,	---L---TQNVEESIENVNTGEVTHSSHINTAEGLDE---SQT-PIITATAVTTTRTATT	49
tr W4VRQ9 W4VRQ9_9DIPT	ITKNDDGVTHNVEEEVQNLGTGQIVYSTQEHKADAPTNN--TPGAFVSGTAITTRTATT	1460
tr S4NVH6 S4NVH6_9NEOP	-----	81
tr S4P6G9 S4P6G9_9NEOP	-----	119
tr S4PZT5 S4PZT5_9NEOP	-----	73
tr B1GS95 B1GS95_COTCN	-----	126
tr G1K0N0 G1K0N0_RHOPR	-----	114
tr A0A0L7KHN0 A0A0L7KHN0_9NEOP	-----	279
tr A0A0L7L3N5 A0A0L7L3N5_9NEOP	LTKNDEGVTHNVEQEVENLGTGEVTFSTHTNKAESLEPMEVGKSPYVTARAVTTTRTATT	2488
tr A0A212EJP2 A0A212EJP2_DANPL	LTKNDEGVTHNVEQEVEHLGTGEVTFSTHTNKAESLEP---EGKSPYVTARAVTTTRTATT	2358
sp Q9V8R9 EPB41_DROME	HEDLGKNAKTEQLEEKTVATTRTHDPNKQQQRVVTQEVKTTATVTSGDQYQ-RRDSVSST	1564
tr A0A0B4LFX4 A0A0B4LFX4_DROME	-----	1490
tr A0A0B4LG23 A0A0B4LG23_DROME	HEDLGKNAKTEQLEEKTVATTRTHDPNKQQQRVVTQEVKTTATVTSGD--Q-RRDSVSST	1562
GCXY01047324.1,	-----	343
GCXY01047324.2,	LKDLGTNAETSEVQEKTATSTTKQGSRQEQRVVTQEV RAT-TVVNDPQIE-RSKSSSSL	107
tr W4VRQ9 W4VRQ9_9DIPT	HEDLGTNIKTQQLEEKTVATTTTQHENRQEHKVITQEVKTTATVTSGDQFINRRRESVSST	1520
tr S4NVH6 S4NVH6_9NEOP	-----	81
tr S4P6G9 S4P6G9_9NEOP	-----	119
tr S4PZT5 S4PZT5_9NEOP	-----	73
tr B1GS95 B1GS95_COTCN	-----	126

tr G1K0N0 G1K0N0_RHOPR	-----	114
tr A0A0L7KHN0 A0A0L7KHN0_9NEOP	-----	279
tr A0A0L7L3N5 A0A0L7L3N5_9NEOP	HHDLDTKAKTQQMEERTVAQTVTSSATRQEQRVLTQEVKTM--VTTGDQVH-N-----	2538
tr A0A212EJP2 A0A212EJP2_DANPL	HHDLDTKARTQQMEECTVAHTVTSSATRQEQRVLTQQVKTT--VTTGDQLT-RRGSQSSL	2415

sp Q9V8R9 EPB41_DROME	SSGDSGTPIDGPDYGASVVRT--DNQKSPLFTT---SATTG-----PHVESTRV	1608
tr A0A0B4LFX4 A0A0B4LFX4_DROME	-----KSPLFTT---SATTG-----PHVESTRV	1510
tr A0A0B4LG23 A0A0B4LG23_DROME	SSGDSGTPIDGPDYGASVVRT--DNQKSPLFTT---SATTG-----PHVESTRV	1606
GCXY01047324.1,	-----	343
GCXY01047324.2,	SSDDSGTPIDGDYYPDRPQGPIVET-EKVVYSRPLGEDGMGEELRTSSPPLVPTV-SQRL	165
tr W4VRQ9 W4VRQ9_9DIPT	SSGDSGTPIDGPDYQSNVILN--KSYTGVQEGS---NLPSG-----PNVEQHHV	1564
tr S4NVH6 S4NVH6_9NEOP	-----	81
tr S4P6G9 S4P6G9_9NEOP	-----	119
tr S4PZT5 S4PZT5_9NEOP	-----	73
tr B1GS95 B1GS95_COTCN	-----	126
tr G1K0N0 G1K0N0_RHOPR	-----	114
tr A0A0L7KHN0 A0A0L7KHN0_9NEOP	-----	279
tr A0A0L7L3N5 A0A0L7L3N5_9NEOP	-----P-----LHT-----	2542
tr A0A212EJP2 A0A212EJP2_DANPL	SSGDSGTPIDLDEGSEGHYYTAPGSYTTTTTSSAVGNAPFGGV-----LHSASARM	2466

sp Q9V8R9 EPB41_DROME	VLGEDTPGFSGHGEIISTQT-----VSSKTRTVETITYKTERDGVETRVEQKITIQ	1660
tr A0A0B4LFX4 A0A0B4LFX4_DROME	VLGEDTPGFSGHGEIISTQT-----VSSKTRTVETITYKTERDGVETRVEQKITIQ	1562
tr A0A0B4LG23 A0A0B4LG23_DROME	VLGEDTPGFSGHGEIISTQT-----VSSKTRTVETITYKTERDGVETRVEQKITIQ	1658
GCXY01047324.1,	-----	343
GCXY01047324.2,	ELEDGT--FSLHGTITS-QT-----ITSKTRTVETLTYKTEKDGVVETRVEQKITIQ	214
tr W4VRQ9 W4VRQ9_9DIPT	FLDDD--GTAERGEIVSTQT-----VSSKTRTVETITYKTERDGVETRVEQKITIQ	1614
tr S4NVH6 S4NVH6_9NEOP	-----	81
tr S4P6G9 S4P6G9_9NEOP	-----	119
tr S4PZT5 S4PZT5_9NEOP	-----	73
tr B1GS95 B1GS95_COTCN	-----	126
tr G1K0N0 G1K0N0_RHOPR	-----	114
tr A0A0L7KHN0 A0A0L7KHN0_9NEOP	-----	279
tr A0A0L7L3N5 A0A0L7L3N5_9NEOP	-----	2542
tr A0A212EJP2 A0A212EJP2_DANPL	TSSPPPPSPPAEGEVVSSQT-----ISSKTRTVETITYKTERNGVVETRVEQKITIQ	2518

sp Q9V8R9 EPB41_DROME	SDGDPIDHDKALAEAIQEATAMNPDMTVEKIEIQQTQ--	1698
tr A0A0B4LFX4 A0A0B4LFX4_DROME	SDGDPIDHDKALAEAIQEATAMNPDMTVEKIEIQQTQ--	1600
tr A0A0B4LG23 A0A0B4LG23_DROME	SDGDPIDHDKALAEAIQEATAMNPDMTVEKIEIQQTQ--	1696
GCXY01047324.1,	-----	343
GCXY01047324.2,	SDGDPIDHEKALNDAIQEATAMNPDLMEKIEIQQE----	250
tr W4VRQ9 W4VRQ9_9DIPT	SDGDPIDHDKALAEAIQEATAMNPDMTVEKIEIQQTQ--	1652
tr S4NVH6 S4NVH6_9NEOP	-----	81
tr S4P6G9 S4P6G9_9NEOP	-----	119
tr S4PZT5 S4PZT5_9NEOP	-----	73

tr B1GS95 B1GS95_COTCN	-----	126
tr G1K0N0 G1K0N0_RHOPR	-----	114
tr A0A0L7KHN0 A0A0L7KHN0_9NEOP	-----	279
tr A0A0L7L3N5 A0A0L7L3N5_9NEOP	-----	2542
tr A0A212EJP2 A0A212EJP2_DANPL	SDGDPIDHDRLAEAIQEATAMNPDMTVEKIEIQQSTQP	2558