

CLUSTAL 2.1 MULTIPLE SEQUENCE ALIGNMENT

File: /media/morpheus/disk1/fst/pep_msa/LACB2.pep Tue Feb 1 13:52:49 2022

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*  ::** **:*****:***** *
Mus_musculus      -----MAAALQRIEQLSSRVVRVLGCNPGPMTLQGTNTYLVGTGS----- 40
Rattus_norvegicus -----MAAALQRIEQLSSRVVRVLGCNPGPMTLQGTNTYLVGTGS----- 40
Homo_sapiens       -----MAAVLQVRVERLSNRVVRVLGCNPGPMTLQGTNTYLVGTGP----- 40
Pan_troglodytes    -----MAAVLQVRVERLSNRVVRVLGCNPGPMTLQGTNTYLVGTGP----- 40
Macaca_mulatta     -----MAAILQVRVERLSNRVVRVLGCNPGPMTLQGTNTYLVGTGP----- 40
Callithrix_jacchus -----MAAVLQGIERLSSRVVRVLGCNPGPMTLQGTNTYLVGTGP----- 40
Bos_taurus         -----MAATLQRIERLSSRVVRVLGCNPGPMTLQGTNTYLVGTGP----- 40
Equus_caballus     -----MSASLRPIERLSGRVVRVLGCNPGPMTLQGTNTYLVGTGP----- 40
Canis_lupus_familiaris -----MSAVLQRIERLSGRVVRVLGCNPGPMTLQGTNTYLVGVGT----- 40
Heterocephalus_glaber -----MAVALPCIERLSRVVRVLGCNPGPMTLQGTNTYLVGTGS----- 40
Gallus_gallus      -----MASLLPRIERLSSRVVRVLGCNPGPMTLQGTNTYLVGTGL----- 40
Pavo_cristatus     -----MASLLPRIERLSSRVVRVLGCNPGPMTLQGTNTYLVGTGL----- 40
Pavo_muticus       -----MASLLPRIERLSSRVVRVLGCNPGPMTLQGTNTYLVGTGL----- 40
Taeniopygia_guttata -----MVSLLPRIERLSSRVVRVLGCNPGPMTLQGTNTYLVGSGH----- 40
Chelonia_mydas     -----MASLLPRIERLSSRVVRVLGCNPGPMTLQGTNTYLVGTGP----- 40
Xenopus_tropicalis MFSLPHFRLVPCRCMALSVLPRLQLSARVVRVLGCNPGPMTLQGTNTYLVGTGP----- 56
Rhinatrema_bivittatum -----MTAVLARIERLSSRVVRVLGCNPGPMTLQGTNTYLVGTGRSVCS----- 44
1.....10.....20.....30.....40.....50.....60

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Mus_musculus      -----RRILIDTGEPSVPEYISCLKQALVEFDTAIQEILVTHWHS DHSG----- 84
Rattus_norvegicus -----RRILIDTGEPSVPEYISCLKQALAEFDTAIQEILVTHWHRD HSG----- 84
Homo_sapiens       -----RRILIDTGEPAIPEYISCLKQALTEFNIAIQEIVVTHWHRD HSG----- 84
Pan_troglodytes    -----RRILIDTGEPAIPEYISCLKQALTEFNIAIQEIVVTHWHRD HSG----- 84
Macaca_mulatta     -----RRILIDTGEPAIPEYIRCLKQALTEFNIAIQEIVVTHWHRD HSG----- 84
Callithrix_jacchus -----RRILIDTGEPAIPEYISCLKQALTEFNIAIQEIVVTHWHRD HSG----- 84
Bos_taurus         -----RRILIDTGEPSIPEYISCLKQALTEFNIAIQEIVVTHWHRD HSG----- 84
Equus_caballus     -----RRILIDTGEPAVPEYISCLKQALTEFNIAIQEIVVTHWHRD HSG----- 84
Canis_lupus_familiaris -----RRILIDTGEPAIPEYISCLKQALTEFNITIQEIVVTHWHRD HSG----- 84
Heterocephalus_glaber -----RRILIDTGETAIPEYISCLKQALVEFNIAIQEILVTHWHRD HSG----- 84
Gallus_gallus      -----RRILIDTGEPAIPEYIGCLKQALSEFNISIQEILVTHWHRD HSG----- 84
Pavo_cristatus     -----RRILIDTGEPAIPEYIGCLKQALSEFNISIQEILVTHWHRD HSG----- 84
Pavo_muticus       -----RRILIDTGEPAIPEYIGCLKQALSEFNISIQEILVTHWHRD HSG----- 84
Taeniopygia_guttata -----RRVLDITGEPGIPEYISCLKQALTEFNIAIQEIVVTHWHRD HSG----- 84
Chelonia_mydas     -----RRILIDTGEPAIPEYIGCLKQALAEFNISIQEILVTHWHRD HSG----- 84
Xenopus_tropicalis -----RRILIDTGEPAVPEYISCLKQALTEFNITIQEIVVTHWHRD HSG----- 100
Rhinatrema_bivittatum RQGITDAACNRINITLQRLVLDITGEPVPEYINCLKQALTEFNITIQEIVVTHWHRD HSG----- 104
.....70.....80.....90.....100.....110.....120

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Mus_musculus      GIVDICKNINNDTTYCIKKLRRNPQREEIIGNGEQQYFYIENG DVVKTEGATLRVLYTPG----- 144
Rattus_norvegicus GIVDICKNISNDATYCIKKLRRNPQKEEIIIGSGEQQYVYIEDGDLIKTEGATLRVLYTPG----- 144
Homo_sapiens       GIGDICKSINNDTTYCIKKLPRNPQREEIIGNGEQQYVYLKGDGVIKTEGATLRVLYTPG----- 144
Pan_troglodytes    GIGDICKSINNDTTYCIKKLPRNPQREEIIGNGEQQYVYLKGDGVIKTEGATLRVLYTPG----- 144
Macaca_mulatta     GIGDICKSINNDTTYCIKKLPRNPQREEIIGNGEQQYVYLKGDGVIKTEGATLRVLYTPG----- 144
Callithrix_jacchus GIGDICKSINNDTTYCIKKLPRNPQREEIIGNGEQQYVYLKGDGVIKTEGATLRVLYTPG----- 144
Bos_taurus         GIGDICKSINNDTTYCVKKLPRNPQKEEIIIGNGEQQYVYVKDGDIIKTEGATLRVLYTPG----- 144
Equus_caballus     GIRDICKSISNDTVYCIKKLPRNPQKEEIIIGDGEQQYVYLKGDGVIKTEGATLRVLYTPG----- 144
Canis_lupus_familiaris GIGDICKSINNDTAYCIKKLPRNPQKEEIIIGDGTQQYVYLQDGVIKTEGATLRVLYTPG----- 144
Heterocephalus_glaber GIEDICKSINNDTAYCIKKLPRNPQKEEIIIGNGAQQYIYLKQDGVIKTEGATLRVLYTPG----- 144
Gallus_gallus      GIPDICTNIPNDSEYRICKLPRVPCHCEEIIIGDGGHKYLYLKGDGVITTEGATLRVLYTPG----- 144
Pavo_cristatus     GIPDICTNIPNDSEYRICKLPRVPCHCEEIIIGDGGHKYLYLKGDGVITTEGATLRVLYTPG----- 144
Pavo_muticus       GIPDICTNIPNDSEYRICKLPRVPCHCEEIIIGDGGHKYLYLKGDGVITTEGATLRVLYTPG----- 144
Taeniopygia_guttata GIPDICKSIPSDSEYRICKLPRVPCHCEETI-EGGHKYFYLKGDGVITTEGATLRVLYTPG----- 143
Chelonia_mydas     GISDICTRNINHGSEYRICKLPRTPHREEIIEGENLKYLYLKGDGVITTEGATLRVLYTPG----- 144
Xenopus_tropicalis GIADICTDIMNGCNFSVSKLPRNPQEEVIGAVEHKYLYLKGDGIITTEGATLRVLYTPG----- 160
Rhinatrema_bivittatum GILDVCRSIGSDSKFCISKLPSPYVEEIIIGKGEQKYTYVKDGDITTEGATLRVLYTPG----- 164
.....130.....140.....150.....160.....170.....180

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***** * * ****:*****::*: * ****:*. ** :.. *****:
Mus_musculus      HTDDHMAALLLEENAI FSGDCILGEGTTIFEDLYDYMNSLNNLLKIKANI IYPGHGPVIH 204
Rattus_norvegicus HTDDHMAALLLEENAI FSGDCILGEGTTIFEDLYDYMNSLKDLLKVKANI IYPGHGPVIH 204
Homo_sapiens      HTDDHMAALLLEENAI FSGDCILGEGTTIFEDLYDYMNSLKELLKIKADI IYPGHGPVIH 204
Pan_troglodytes   HTDDHMAALLLEENAI FSGDCILGEGTTIFEDLYDYMNSLKELLKIKADI IYPGHGPVIH 204
Macaca_mulatta    HTDDHMAALLLEENAI FSGDCILGEGTTIFEDLYDYMNSLKELLKIKADI IYPGHGPVIH 204
Callithrix_jacchus HTDDHMAALLLEENAI FSGDCILGEGTTIFEDLYDYMNSLKELLKIKADI IYPGHGPVIH 204
Bos_taurus        HTDDHMAALVLEENAI FSGDCILGEGTTVFEDLYDYMNSLKELLKIKAKVI IYPGHGPVIH 204
Equus_caballus    HTDDHMAALLLEENAI FSGDCILGEGTTVFEDLYDYMNSLRELLKIKADI IYPGHGPVIH 204
Canis_lupus_familiaris HTDDHMAALYLEENAI FSGDCILGEGTTIFEDLYDYMNSLKVLLKVKADI IYPGHGPVIH 204
Heterocephalus_glaber HSDDHMAHLLEENAI FSGDCILGEGTSIFEDLYDYMNSLNNLLKVKADI IYPGHGPVIQ 204
Gallus_gallus     HTDDHMSLHLEENAI FSGDCILGEGTTVIEDLYDYMKS LKMLLQMKPDLI YPGHGPVVR 204
Pavo_cristatus    HTDDHMSLHLEENAI FSGDCILGEGTTVIEDLYDYMKS LKMLLQMKPDLI YPGHGPVVR 204
Pavo_muticus      HTDDHMSLHLEENAI FSGDCILGEGTTVIEDLYDYMKS LKMLLQMKPDLI YPGHGPVVR 204
Taeniopygia_guttata HTDDHMILHLEENAI FSGDCILGEGTTVIEDLYDYMKS LKMLLQMKPDLI YPGHGPVVR 203
Chelonia_mydas    HTDDHMAHLVLEENAI FSGDCILGEGTAVFEDLYDYMKS LEILLQMQADLI YPGHGPVVQ 204
Xenopus_tropicalis HTDDHMALELLEENAI FSGDCILGEGTAVFEDLYDYMKS LEKLLKEMKADKI YPGHGPVVL 220
Rhinatrema_bivittatum HTDDHMAVLLEENAI FSGDCILGEGTAVFEELYDYMKS LEKLLGTKANI IYPGHGPVIL 224
.....190.....200.....210.....220.....230.....240

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Mus_musculus      NAEAKILEYISHRNNREEQIISLFRDNFEKSFVTTELRTMIYKDV PENLHKMAEHNLLLH 264
Rattus_norvegicus NAEAKILEYISHRNNREEQIITVFRDNL EESFSVSELRKMIYKNV PENLHKMAEHNLLLH 264
Homo_sapiens      NAEAKIQQYISHRNIREQQILTLFRENFEKSFVTMELVKI IYKNTPENLHEMAKH NLLLH 264
Pan_troglodytes   NAEAKIQQYISHRNIREQQILTLFRENFEKSFVTMELVKI IYKNTPENLHEMAKH NLLLH 264
Macaca_mulatta    NAEAKIQEYISHRNIREQQILTLFRENFEKSFVTMELVKI IYKNTPENLHEMAKRN LLLLH 264
Callithrix_jacchus NAEAKIQEYISHRNTREQQILTLFRENFEKSFVTMELVKI IYKNTPENLHKMAKH NLLLH 264
Bos_taurus        NAEAKILQYISHRNIREQQILTVFHENFEKSFVTAMELVKSIYKDTPEHLHKMAQH NVLLH 264
Equus_caballus    NAEAKILQYISHRNIREQQILTVFHENFEKSFVTAMELVKSIYKNTPEHLYKMAERN LLLLH 264
Canis_lupus_familiaris NAEAKILEYISHRNTREQQILTLFRDNFEKSFVTAMELVKSIYKNV PDNLHKMAEHN VLLH 264
Heterocephalus_glaber NAEAAIQQYISHRNIREQQILTLFIRDNFEKSFVTTELVKIYKNV PENLHKMAERNL FLH 264
Gallus_gallus     DANARIQGYISHRNAREEQILNVFQKNAGKSYTSSELVKIYK DIPENLLLA AENNLIVH 264
Pavo_cristatus    DANARIQGYISHRNAREEQILNVFQKNAGKSYTSSELVKIYK DIPENLLLA AENNLVVH 264
Pavo_muticus      DANARIQGYISHRNAREEQILNVFQKNAGKSYTSSELVKIYK DIPENLLLA AENNLVVH 264
Taeniopygia_guttata DANTRIQNYISHRLAREQQI IINVFQKNTGKSYTSSELVKMVKYKEI PENLLPAAERN LLVH 263
Chelonia_mydas    DARAKIQGYISHRNAREEQIVNVLQENAGKSFVSVELVKIYK ETPENLLKAAEN NTLH 264
Xenopus_tropicalis GARAKIQEYISHRHAREQQI LQALQENSGRSFTSMDLVKIYK DIPENLLPAAERN LTHH 280
Rhinatrema_bivittatum DAEAKIQEYISHRNAREEQILNFAQDNQGTSLTSMELVKIYK DIPENLLPAAERN LTHH 284
.....250.....260.....270.....280.....290.....300

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*:***:***
Mus_musculus      LRKLEKDGKIFYTTTPV-----KKWKAVL----- 288
Rattus_norvegicus LRKLEKDGKIFSIA SPA-----KKWRASL----- 288
Homo_sapiens      LKKLEKEGKIFSNTDPD-----KKWKAHL----- 288
Pan_troglodytes   LKKLEKEGKIFSNTDPD-----KKWKAHL----- 288
Macaca_mulatta    LKKLEKEGKIFSNTDPD-----KKWKAHL----- 288
Callithrix_jacchus LKKLEKEGKIFCNTDPD-----KKWKAHL----- 288
Bos_taurus        LKKLEKEGKIVSNTDPE-----KKWKAHL----- 288
Equus_caballus    LKKLEKEGKIFSNTDPD-----KKWKANL----- 288
Canis_lupus_familiaris LKKLEKEGKIFSNTDPD-----KKWKANL----- 288
Heterocephalus_glaber LKKLEKEGKIFSNTDPD-----KKWRASL----- 288
Gallus_gallus     LKKLEKEGKVL RDASPS-----FRWRNNL----- 288
Pavo_cristatus    LKKLEKEGKVL RDASPS-----FRWRNNL----- 288
Pavo_muticus      LKKLEKEGKVL CDASPS-----FRWRNNL----- 288
Taeniopygia_guttata LKKLEKEGKYVMKLP TSDGKTIYKLGKIAQECI 296
Chelonia_mydas    LRKLEKEGKVLNEKSPN-----SRWKSSL----- 288
Xenopus_tropicalis LQKLKKEGKI----- 290
Rhinatrema_bivittatum LQKLKKEGKILQEREPT-----IKWKSNTL----- 308
.....310.....320.....330...

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