

CLUSTAL 2.1 MULTIPLE SEQUENCE ALIGNMENT

File: /home/ceglab2/Desktop/ajinkya/pavo/MSD/IN/VS/ Feb 15 16:18:37 2022

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[illegible]

	:.:::..:*****..*.* :*:.*** * . :*:.*: *****..*:.*:**** Pavo_muticus DKEDQFGRTPLMYCVLADRVDCAEALLKAGADVNRADRSRRRTALHLAAQKGNRYFMKLLL 108 Pavo_cristatus DKEDQFGRTPLMYCVLADRVDCAEALLKAGADVNRADRSRRRTALHLAAQKGNRYFMKLLL 108 Gallus_gallus DKEDQFGRTPLMYCVLADRVDCAEALLKAGADVNRADRSRRRTALHLAAQKGNRYFMKLLL 108 Anas_platyrhynchos DKEDQFGRTPLMYCVLADRDLCAEALLKAGADVNRADRSRRRTALHLAAQKGNRYFMKLLL 108 Chelonia_mydas NKEDQFGRTPLMYCVLADRDLCAEALLKAGVGINKADHSQRTALHLAAQKGNRYFMKLLL 101 Rhinatrema_bivittatum DKEDQFGRTPLMYCVLADRIDCAEALLKAGANVNKADSQRTALHLAAQKGNRYFMKLLL 101 Bos_taurus DKEDQFGRTPLMYCVLADRDLDCADTLKAGADVNTDHSQRTALHLAAQKGNRYFMKLLL 101 Pteropus_alecto DKEDQFGRTPLMYCVLADRDLDCADALLKAGADVNTDHSRRRTALHLAAQKGNRYFMKLLL 110 Equus_caballus DKEDQFGRTPLMYCVLADRDLDCADALLKAGANVNKTDHSQRTALHLAAQKGNRYFMKLLL 101 Pan_troglodytes DKEDQFGRTPLMYCVLADRDLDCADALLKAGADVNTDHSQRTALHLAAQKGNRYFMKLLL 101 Macaca_mulatta DKEDQFGRTPLMYCVLADRDLDCADALLKAGADVNTDHSQRTALHLAAQKGNRYFVKLLL 101 Homo_sapiens DKEDQFGRTPLMYCVLADRDLDCADALLKAGADVNTDHSQRTALHLAAQKGNRYFMKLLL 101 Callithrix_jacchus DKEDQFGRTPLMYCVLADRDLDCADALLKAGADVNTDHSQRTALHLAAQKGNRYFMKLLL 101 Mus_musculus DKEDRFGRTPLMYCVLADRVDCAEALLKAGADVNTDHSRRRTALHLAAQKGNRYFMKLLL 101 Ornithorhynchus_anatinus DKEDQFGRTPLMYCVLADRGDCAQVLLKAGADVNTDHSQRTALHLAAQKGNRYFMKLLL 120 Xenopus_tropicalis DQEDQLGRTPLMYSVLGDRRNCAEALLKHGAQVNRSDRSQRTALHLAAQTGNHRLILLLL 9770.....80.....90.....100.....110.....120	
Pavo_muticus	DKEDQFGRTPLMYCVLADRVDCAEALLKAGADVNRADRSRRRTALHLAAQKGNRYFMKLLL	108
Pavo_cristatus	DKEDQFGRTPLMYCVLADRVDCAEALLKAGADVNRADRSRRRTALHLAAQKGNRYFMKLLL	108
Gallus_gallus	DKEDQFGRTPLMYCVLADRVDCAEALLKAGADVNRADRSRRRTALHLAAQKGNRYFMKLLL	108
Anas_platyrhynchos	DKEDQFGRTPLMYCVLADRDLCAEALLKAGADVNRADRSRRRTALHLAAQKGNRYFMKLLL	108
Chelonia_mydas	NKEDQFGRTPLMYCVLADRDLCAEALLKAGVGINKADHSQRTALHLAAQKGNRYFMKLLL	101
Rhinatrema_bivittatum	DKEDQFGRTPLMYCVLADRIDCAEALLKAGANVNKADSQRTALHLAAQKGNRYFMKLLL	101
Bos_taurus	DKEDQFGRTPLMYCVLADRDLDCADTLKAGADVNTDHSQRTALHLAAQKGNRYFMKLLL	101
Pteropus_alecto	DKEDQFGRTPLMYCVLADRDLDCADALLKAGADVNTDHSRRRTALHLAAQKGNRYFMKLLL	110
Equus_caballus	DKEDQFGRTPLMYCVLADRDLDCADALLKAGANVNKTDHSQRTALHLAAQKGNRYFMKLLL	101
Pan_troglodytes	DKEDQFGRTPLMYCVLADRDLDCADALLKAGADVNTDHSQRTALHLAAQKGNRYFMKLLL	101
Macaca_mulatta	DKEDQFGRTPLMYCVLADRDLDCADALLKAGADVNTDHSQRTALHLAAQKGNRYFVKLLL	101
Homo_sapiens	DKEDQFGRTPLMYCVLADRDLDCADALLKAGADVNTDHSQRTALHLAAQKGNRYFMKLLL	101
Callithrix_jacchus	DKEDQFGRTPLMYCVLADRDLDCADALLKAGADVNTDHSQRTALHLAAQKGNRYFMKLLL	101
Mus_musculus	DKEDRFGRTPLMYCVLADRVDCAEALLKAGADVNTDHSRRRTALHLAAQKGNRYFMKLLL	101
Ornithorhynchus_anatinus	DKEDQFGRTPLMYCVLADRGDCAQVLLKAGADVNTDHSQRTALHLAAQKGNRYFMKLLL	120
Xenopus_tropicalis	DQEDQLGRTPLMYSVLGDRRNCAEALLKHGAQVNRSDRSQRTALHLAAQTGNHRLILLLL	97

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Pavo_muticus	ARRGNWMQKDLEGMTPLHLTTRHKS PKCLALLLKHMAPGEVD TQDRNKQTALHWSAYYNN	168
Pavo_cristatus	ARRGNWMQKDLEGMTPLHLTTRHKS PKCLALLLKHMAPGEVD TQDRNKQTALHWSAYYNN	168
Gallus_gallus	ARRGNWMQKDLEGMTPLHLTTRHKS PKCLALLLKHMAPGEVD TQDRNKQTALHWSAYYNN	168
Anas_platyrhynchos	ARRGNWMQKDLEMDTPLHLTTRHKS PKCLALLLKHMAPGEVD TQDKNKQTALHWSAYYNN	168
Chelonia_mydas	ARRANWMQKDLEEMTPHLTTRHKS PKCLALLLKYPAPGEVD TQDRNKQTALHWSAYYNN	161
Rhinatrema_bivittatum	VRKANWMMRDLEEMIPLHLATQHKNPKCLALLLKFMAPGEVDA QDKNKQTALHWSAYYNN	161
Bos_taurus	TRRANWMQKDLEEMTPHLTTRHKS PKCLALLLKFMAPGEVD TQDKNKQTALHWSAYYNN	161
Pteropus_alecto	TRRANWMQKDLEEMTPHLTTRHKS PKCLALLLKFMAPGEVD TQDKNKQTALHWSAYYNN	170
Equus caballus	TRRANWMQKDLEEMTPHLTTRHKS PKCLALLLKFMAPGEVD TQDKNKQTALHWSAYYNN	161
Pan_troglodytes	TRRANWMQKDLEEMTPHLTTRHRS PKCLALLLKFMAPGEVD TQDKNKQTALHWSAYYNN	161
Macaca_mulatta	TRRANWMQKDLEEMTPHLTTRHRS PKCLALLLKFMAPGEVD TQDKNKQTALHWSAYYNN	161
Homo_sapiens	TRRANWMQKDLEEMTPHLTTRHRS PKCLALLLKFMAPGEVD TQDKNKQTALHWSAYYNN	161
Callithrix_jacchus	TRRANWMQKDLEEMTPHLTTRHKS PKCLALLLKFMAPGEVD TQDKNKQTALHWSAYYNN	161
Mus_musculus	TRRANWMQKDLEEMTPHLSTRHRS PKCLALLLKFMAPGEVD TQDKNKQTALHWSAYYNN	161
Ornithorhynchus_anatinus	TRRANWMKKDLESMTPLHLSTRHKS PKCLALLLKFMAPGEVD TQDKNKQTALHWSAYYNN	180
Xenopus_tropicalis	SRKADCTHRDLRDI TAVHLSTRHQDT RCLALLLK YTPPGQVDA QDQRKQTALHWSAYYNR	157
130.....140.....150.....160.....170.....180	

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Pavo_muticus      PEHVKLLIKHDSNIGIPDIEGKIPLHWAANNKDP SAIHTVKCILEAAPTESLLNWQDYEG 228
Pavo_cristatus    PEHVKLLIKHDSNIGIPDIEGKIPLHWAANNKDP SAIHTVKCILEAAPTESLLNWQDYEG 228
Gallus_gallus     PEHVKLLIKHDSNIGIPDIEGKIPLHWAANNKDP SAIHTVKCILEAAPTESLLNWQDYEG 228
Anas_platyrhynchos PEHVKLLIKHDSNIGIPDIEGKIPLHWAANNKDP SAIHTVKCILEAAPTESLLNWQDYEG 228
Chelonia_mydas    PEHVKLLIKHDSNIGIPDIEGKIPLHWAANNKDP GAILTVKCILDAAPTESLLNWQDYEG 221
Rhinatrema_bivittatum PEHVKLLIKHDSNIGIPDIEGKIPLHWAANNKDP SAIHTVKCILDAAPTESLLNWQDYEG 221
Bos_taurus        PEHVKLLIKHDSNIGIPDVEGKIPLHWAANNKDP SAVHTVRCILDAAPTESLLNWQDYEG 221
Pteropus_alecto   PEHVKLLIKHDSNIGIPDVEGKIPLHWAANNKDP SAVHTARCILDAAPTESLLNWQDYEG 230
Equus_caballus    PEHVKLLIKHDSNIGIPDVEGKIPLHWAANNKDP SAVHTVRCILDAAPTESLLNWQDYEG 221
Pan_troglodytes   PEHVKLLIKHDSNIGIPDVEGKIPLHWAANNKDP SAVHTVRCILDAAPTESLLNWQDYEG 221
Macaca_mulatta    PEHVKLLIKHDSNIGIPDVEGKIPLHWAANNKDP SAVHTVRCILDAAPTESLLNWQDYEG 221
Homo_sapiens      PEHVKLLIKHDSNIGIPDVEGKIPLHWAANNKDP SAVHTVRCILDAAPTESLLNWQDYEG 221
Callithrix_jacchus PEHVKLLIKHDSNIGIPDVEGKIPLHWAANNKDP SAVHTVRCILDAAPTESLLNWQDYEG 221
Mus_musculus      PEHVKLLIKHDSNIGIPDVEGKIPLHWAANNKDP SAVHTVRCILDAAPTESLLNWQDYEG 221
Ornithorhynchus_anatinus PEHVKLLIKHDSNIGIPDIEGKIPLHWAANNKDP SAIHTVRCILDAAPTESLLNWQDYEG 240
Xenopus_tropicalis PRHVRLVLRHGSNIGIPDTEGKIPLHWAAGHKDP EAALTVRCILLEAAPTESLLNWQDYEG 217
.....190.....200.....210.....220.....230.....240

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Pavo_muticus      RTPLHFAVADGNVAVVDVLT SYEGCNVTSYDNLFRTPLHWAALLGHAQIVHLLLERNKFG 288
Pavo_cristatus    RTPLHFAVADGNVAVVDVLT SYEGCNVTSYDNLFRTPLHWAALLGHAQIVHLLLERNKFG 288
Gallus_gallus     RTPLHFAVADGNVAVVDVLT SYEGCNVTSYDNLFRTPLHWAALLGHAQIVHLLLERNKFG 288
Anas_platyrhynchos RTPLHFAVADGNVAVVDVLT SYEGCNVTSYDNLFRTPLHWAALLGHAQIVHLLLERNKFG 288
Chelonia_mydas    RTPLHFAVADGNVAVVDVLT SYDGCNVTSYDNLFRTPLHWAALLGHAQIVHLLLERNKFG 281
Rhinatrema_bivittatum RTPLHFAVADGNESVVDVLT SYEGCNVTSYDNLFRTPLHWAALLGHAQIVHLLLERNKSG 281
Bos_taurus        RTPLHFAVADGNVTVDVLT SYESCNITSYDNLFRTPLHWAALLGHAQIVHLLLERNKSG 281
Pteropus_alecto   RTPLHFAVADGNVTVDVLT SYESCNITSYDNLFRTPLHWAALLGHAQIVHLLLERNKSG 290
Equus_caballus    RTPLHFAVADGNVTVDVLT SYESCNITSYDNLFRTPLHWAALLGHAQIVHLLLERNKSG 281
Pan_troglodytes   RTPLHFAVADGNVTVDVLT SYESCNITSYDNLFRTPLHWAALLGHAQIVHLLLERNKSG 281
Macaca_mulatta    RTPLHFAVADGNVTVDVLT SYESCNITSYDNLFRTPLHWAALLGHAQIVHLLLERNKSG 281
Homo_sapiens      RTPLHFAVADGNVTVDVLT SYESCNITSYDNLFRTPLHWAALLGHAQIVHLLLERNKSG 281
Callithrix_jacchus RTPLHFAVADGNVTVDVLT SYESCNITSYDNLFRTPLHWAALLGHAQIVHLLLERNKSG 281
Mus_musculus      RTPLHFAVADGNLTVDVLT SYESCNITSYDNLFRTPLHWAALLGHAQIVHLLLERNKSG 281
Ornithorhynchus_anatinus RTALHFAVADGNLAVVDVLT SYGTCNVTPYDNLFRTPLHWAALLGHTQIVHLLLERNKFG 300
Xenopus_tropicalis RTPLHLAVGDGNQEVRLT SYRGCNVAPYDNLFRTPLHWAALLGHTPIAHLLLERNKSP 277
.....250.....260.....270.....280.....290.....300

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*****:*.*** .:***:*.*****: *****:*****:*.***:
Pavo_muticus      TIPSDSQGATPLHYAAQSNFAETVEVFLKHPSVKDDSDLEGRTSFMWAAGKGSDDNVIRTM 348
Pavo_cristatus    TIPSDSQGATPLHYAAQSNFAETVEVFLKHPSVKDDSDLEGRTSFMWAAGKGSDDNVIRTM 348
Gallus_gallus     TIPSDSQGATPLHYAAQSNFAETVEVFLKHPSVKDDSDLEGRTSFMWAAGKGSDDNVIRTM 348
Anas_platyrhynchos TIPSDSQGATPLHYAAQSNFAETVEVFLKHPSVKDDSDLEGRTSFMWAAGKGSDDVIRTM 348
Chelonia_mydas    TIPSDSQGATPLHYAAQSNFAETVEVFLKHPSVKDDSDLEGRTSFMWAAGKGSDDVIRTM 341
Rhinatrema_bivittatum TIPSDSQGATPLHYAASQSNFAETVEVFLKHPSVKDDSDLEGRTAFMWAAGKGSDDVIRTM 341
Bos_taurus        TIPSDSQGATPLHYAAQSNFAETVKVFLKHPSVKDDSDLEGRTSFMWAAGKGSDDVLRMTM 341
Pteropus_alecto   TIPSDSQGATPLHYAAQSNFAETVKVFLKHPSVKDDSDLEGRTSFMWAAGKGSDDVLRMTM 350
Equus_caballus    TIPSDSQGATPLHYAAQSNFAETVKVFLKHPSVKDDSDLEGRTSFMWAAGKGSDDVLRMTM 341
Pan_troglodytes   TIPSDSQGATPLHYAAQSNFAETVKVFLKHPSVKDDSDLEGRTSFMWAAGKGSDDVLRMTM 341
Macaca_mulatta    TIPSDSQGATPLHYAASQSNFAETVKVFLKHPSVKDDSDLEGRTSFMWAAGKGSDDVLRMTM 341
Homo_sapiens      TIPSDSQGATPLHYAAQSNFAETVKVFLKHPSVKDDSDLEGRTSFMWAAGKGSDDVLRMTM 341
Callithrix_jacchus TIPSDSQGATPLHYAAQSNFADTVKVFLKHPSVKDDLDLEGRTSFMWAAGKGSDDVLRMTM 341
Mus_musculus      TIPSDSQGATPLHYAASQSNFAETVKVFLQHPSVKDDSDLEGRTSFMWAAGKGNDDVLRMTM 341
Ornithorhynchus_anatinus TIPSDSQGATPLHYATQSNFAETVEVFLKHPSVKDDSDLEGRTSFMWAAGKGSDDVLRMTM 360
Xenopus_tropicalis NIPSDSQGATPLHYAAQGNCPD TVRVLLSHPSVKDEADLEGRTAFMWAAGKGSDEVVIRTM 337
.....310.....320.....330.....340.....350.....360

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Pavo_muticus	LDLKLDDIDINMTDKYAGTALHAAALS GHVSTVKLLLLERNAQVDALDVMKHTPLFRACEMG	408
Pavo_cristatus	LDLKLDDIDINMTDKYAGTALHAAALS GHVSTVKLLLLERNAQVDALDVMKHTPLFRACEMG	408
Gallus_gallus	LDLKLDDIDINMTDKYAGTALHAAALS GHVSTVKLLLLERNAQVDALDVMKHTPLFRACEMG	408
Anas_platyrhynchos	LSLKLDDIDINMTDKYAGTALHAAALS GHVSTVKLLLEHNAQVDALDVMKHTPLFRACEMG	408
Chelonia_mydas	LNLKLDDIDINMADKYAGTALHAAALS GHVSTVKLLLEHNAQIDATDVMKHTPLFRACEMG	401
Rhinatrema_bivittatum	LKLNQDDIDINMADKYGGTALHAAALS GHASTVKLLLLNHEAQVDVDMKHTPLFRACEMG	401
Bos_taurus	LSLKSDIDINMADKYGGTALHAAALS GHVSTVKLLLENNAQVDATDVMKHTPLFRACEMG	401
Pteropus_alecto	LSLKSDIDINMADKYGGTALHAAALS GHVSTVKLLLENNAQVDATDVMKHTPLFRACEMG	410
Equus_caballus	LSLKSDIDINMADKYGGTALHAAALS GHVSTVKLLLENSAQVDATDVMKHTPLFRACEMG	401
Pan_troglodytes	LSLKSDIDINMADKYGGTALHAAALS GHVSTVKLLLENNAQVDATDVMKHTPLFRACEMG	401
Macaca_mulatta	LSLKSDIDINMADKYGGTALHAAALS GHVSTVKLLLENNAQVDATDVMKHTPLFRACEMG	401
Homo_sapiens	LSLKSDIDINMADKYGGTALHAAALS GHVSTVKLLLENNAQVDATDVMKHTPLFRACEMG	401
Callithrix_jacchus	LSLKSDIDINMADKYGGTALHAAALS GHVSTVKLLLENNAQVDATDVMKHTPLFRACEMG	401
Mus_musculus	LSLKSDIDINMSDKYGGTALHAAALS GHVSTVKLLLLDNDAAQVDATDVMKHTPLFRACEMG	401
Ornithorhynchus_anatinus	LSLKLDDIDINMADKYGGTALHAAALS GHVSTVKLLLDHNAQVDATDVMKHTPLFRACEMG	420
Xenopus_tropicalis	LELDHELEVNRIDKYGGTALHAASLSGQITTVRILLENGAQVDAVDVMKHTPLFRACEMG	397
370.....380.....390.....400.....410.....420	

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Pavo_muticus	HKEVIQTLLIKGGARVDLVDQDGHSPHLHWAALGGNADVCQILIENTIINPNVQDYAGRTPLQ	468
Pavo_cristatus	HKEVIQTLLIKGGARVDLVDQDGHSPHLHWAALGGNADVCQILIENTIINPNVQDYAGRTPLQ	468
Gallus_gallus	HKEVIQTLLIKGGARVDLVDQDGHSPHLHWAALGGNADVCQILIENKINPNVQDYAGRTPLQ	468
Anas_platyrhynchos	HKEVIQTLLIKGGARVDLVDQDGHSPHLHWAALGGNADVCQILIENKINPNVQDYAGRTPLQ	468
Chelonia_mydas	HKEVIQTLLIKGGARVDLVDQDGHSPHLHWAALGGNADVCQILIENKINPNVQDYAGRTPLQ	461
Rhinatrema_bivittatum	QREVIQTLLIKGGARVDLVDQDGHSLLHWAALGGNANVCQILIENNINPNVQDYAGRTPLQ	461
Bos_taurus	HKDVIQTLLIKGGARVDLVDQDGHSLLHWAALGGNADVCQILIENKINPNVQDYAGRTPLQ	461
Pteropus_alecto	HKDVIQTLLIKGGARVDLVDQDGHSLLHWAALGGNADVCQILIENKINPNVQDYAGRTPLQ	470
Equus_caballus	HKDVIQTLLIKGGARVDLVDQDGHSLLHWAALGGNADVCQILIENKINPNVQDYAGRTPLQ	461
Pan_troglodytes	HKDVIQTLLIKGGARVDLVDQDGHSLLHWAALGGNADVCQILIENKINPNVQDYAGRTPLQ	461
Macaca_mulatta	HKDVIQTLLIKGGARVDLVDQDGHSLLHWAALGGNADVCQILIENKINPNVQDYAGRTPLQ	461
Homo_sapiens	HKDVIQTLLIKGGARVDLVDQDGHSLLHWAALGGNADVCQILIENKINPNVQDYAGRTPLQ	461
Callithrix_jacchus	HKDVIQTLLIKGRARVDLVDQDGHSLLHWAALGGNADVCQILIENKINPNVQDYAGRTPLQ	461
Mus_musculus	HRDVIQTLLIKGGARVDLVDQDGHSLLHWAALGGNADVCQILIENKINPNVQDYAGRTPLQ	461
Ornithorhynchus_anatinus	HKDVIQTLLIKGGARVDLVDQDGHSPHLHWAALGGNADVCQILIENKINPNVQDYAGRTPLQ	480
Xenopus_tropicalis	HREVIATLVKGGAHVHLVDKDGRSPHLHWAALGGNANVCQILIENNINPDADQYEGRTPLQ	457
430.....440.....450.....460.....470.....480	

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Pavo_muticus	CAAYGGYINCMVVLENNADPNIQDKEGRTALHWLCNNGYLDAIKLLLGFDAFPNHMENS	528
Pavo_cristatus	CAAYGGYINCMVVLENNADPNIQDKEGRTALHWLCNNGYLDAIKLLLGFDAFPNHMENS	528
Gallus_gallus	CAAYGGYINCMVVLENNADPNIQDKEGRTALHWLCNNGYLDAIKLLLGFDAFPNHMENS	528
Anas_platyrhynchos	CAAYGGYINCMVVLENNADPNIQDKEGRTALHWLCNNGYLDAIKLLLGFDAFPNHMENS	528
Chelonia_mydas	CAAYGGYINCMVVLENNADPNIQDKEGRTALHWLCNNGYLDAIKLLLGFDAFPNHMENN	521
Rhinatrema_bivittatum	CAAHGGYINCMAVLMENKADPNIQDKEGRTALHWSNNGYLDAVKLLLNFAAFPNOEMENN	521
Bos_taurus	CAAYGGYINCMAVLMENNADPNIQDKEGRTALHWSNNGYLDAIKLLLDFAAFPNOEMENN	521
Pteropus_alecto	CAAYGGYINCMAVLMENNADPNIQDKEGRTALHWSNNGYLDAIKLLLDFAAFPNOEMENN	530
Equus_caballus	CAAYGGYINCMAVLMENNADPNIQDKEGRTALHWSNNGYLDAIKLLLDFAAFPNOEMENN	521
Pan_troglodytes	CAAYGGYINCMAVLMENNADPNIQDKEGRTALHWSNNGYLDAIKLLLDFAAFPNOEMENN	521
Macaca_mulatta	CAAYGGYINCMAVLMENNADPNIQDKEGRTALHWSNNGYLDAIKLLLDFAAFPNOEMENN	521
Homo_sapiens	CAAYGGYINCMAVLMENNADPNIQDKEGRTALHWSNNGYLDAIKLLLDFAAFPNOEMENN	521
Callithrix_jacchus	CAAYGGYINCMAVLMENNADPNIQDKEGRTALHWSNNGYLDAIKLLLDFAAFPNOEMENN	521
Mus_musculus	CAAYGGYINCMAVLMENNADPNIQDKEGRTALHWSNNGYLDAIKLLLDFAAFPNOEMENN	521
Ornithorhynchus_anatinus	CAAYGGYIHCMAVLMENSADPNIQDKEGRTALHWSNNGYLDAIKLLLDFAAFLNHMENN	540
Xenopus_tropicalis	CAAYGGYIGCEVLMENKADPNIQDKNGRTALHWSNNGYLDAVKLLLGYSAFPNOEMENT	517
490.....500.....510.....520.....530.....540	

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Pavo_muticus	EERYTPLDYALLGEHHEVIQFMLEHGALSIAAIQDIAAFKIQAVYKGYKVRKAFQERKNL	588
Pavo_cristatus	EERYTPLDYALLGEHHEVIQFMLEHGALSIAAIQDIAAFKIQAVYKGYKVRKAFQERKNL	588
Gallus_gallus	EERYTPLDYALLGEHHEVIQFMLEHGALSIAAIQDIAAFKIQAVYKGYKVRKAFQERKNL	588
Anas_platyrhynchos	EERYTPLDYALLGEHHEVIQFMLEHGALSIAAIQDIAAFKIQAVYKGYKVRKAFQERKNL	588
Chelonia_mydas	EERYTPLDYALLGEHHEVIQFMLEHGALSIAAIQDIAAFKIQAVYKGYKVRKAFQDRKNL	581
Rhinatrema_bivittatum	EERYTPLDYALLGEHHEVIQFMLEHGALSIAAIQDIAASKIQAVYKGYKVRKAFQERKNL	581
Bos_taurus	EERYTPLDYALLGERHEVIQFMLEHGALSIAAIQDIAAFKIQAVYKGYKVRKAFRDRKNL	581
Pteropus_alecto	EERYTPLDYALLGERHEVIQFMLEHGALSIAAIQDIAAFKIQAVYKGYKVRKAFRDRKNL	590
Equus_caballus	EERYTPLDYALLGERHEVIQFMLEHGALSIAAIQDIAAFKIQAVYKGYKVRKAFRDRKNL	581
Pan_troglodytes	EERYTPLDYALLGERHEVIQFMLEHGALSIAAIQDIAAFKIQAVYKGYKVRKAFRDRKNL	581
Macaca_mulatta	EERYTPLDYALLGERHEVIQFMLEHGALSIAAIQDIAAFKIQAVYKGYKVRKAFRDRKNL	581
Homo_sapiens	EERYTPLDYALLGERHEVIQFMLEHGALSIAAIQDIAAFKIQAVYKGYKVRKAFRDRKNL	581
Callithrix_jacchus	EERYTPLDYALLGERHEVIQFMLEHGALSIAAIQDIAAFKIQAVYKGYKVRKAFRDRKNL	581
Mus_musculus	EERYTPLDYALLGERHEVIQFMLEHGALSIAAIQDIAAFKIQAVYKGYKVRKAFRDRKNL	581
Ornithorhynchus_anatinus	EERYTPLDYALLGEHHEVIQFMLEHGALSIAAIQDIAAFKIQAVYKGYKVRKAFQDRKNL	600
Xenopus_tropicalis	EERYTPLDYALLGGHQEVIQFMLEHGALSIAAIQDIAASKIQAVYKGHKVRRAFQERKNL	577
550.....560.....570.....580.....590.....600	

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Pavo_muticus	LMKH E QLRKDA AA KKRE EE SKRKEANLQKGMNME-----QNKFRVQPS T ADREKT---	639
Pavo_cristatus	LMKH E QLRKDA AA KKRE EE SKRKEANLQKGMNME-----QNKFRVQPS T ADREKT---	639
Gallus_gallus	LMKH E QLRKDA AA KKRE EE SKRKEASLQKGMNME-----QNK F QVQLS T AVREKT---	639
Anas_platyrhynchos	LMKH E QLRKDA AA KKRE EE SKRKEAKLQKGTOSVE-----QSKFRVQQN P ANREKT---	639
Chelonia_mydas	LMKH E QLRKDA AA KKRE EE NKRKEA EL RKGMODLV-----LNRVQVQ PH PANREKSN-R	634
Rhinatrema_bivittatum	LMKH E QLRKDA AA KKRE EE NKRKEAQLRKGIQNPV-----DLVVRAQQNLENTETCN T F	635
Bos_taurus	LMKH E QLRKDA AA KKRE EE NKRREA E QOKGRLSPD-----SCRPHAPLCLPRTQAE P HR	635
Pteropus_alecto	LMKH E QLRKDA AA KKRE EE NKRREA E QOKGRLSPD-----PCRPQAP---PS T HAEPHR	641
Equus_caballus	LMKH E QLRKDA AA KKRE EE NKRREA E QOKGMLSPD-----SCR P QAPPCLPSTQGE P CK	635
Pan_troglodytes	LMKH E QLRKDA AA KKRE EE NKRKEA E QOKGROSPD-----SCR P QALPCLPSTQDV P SR	635
Macaca_mulatta	LMKH E QLRKDA AA KKRE EE NKRKEA E QOKGROSPD-----SCR P QALPCLPSTRDAP S R	635
Homo_sapiens	LMKH E QLRKDA AA KKRE EE NKRKEA E QOKGRRSPD-----SCR P QALPCLPSTQDV P SR	635
Callithrix_jacchus	LMKH E QLRKDA AA KKRE EE NKRKEA E QOKGRRSPD-----SCR P QALPCL T STQDAP S R	635
Mus_musculus	LMKH E QLRKDA AA KKRE EE NKRKEA E QOKGQLDTP PP RS H CSSSAPVLPCPPSPQNEA S K	641
Ornithorhynchus_anatinus	LMKH E QLRRDAANKKRE EE NKRK----HGG P SS P V-----AC P APANAETEA	643
Xenopus_tropicalis	LMKH E QLRKGA AA KKRE GD NRHKVVRVGT E CKQ R D-----ENLMER N KNS N Q	624
610.....620.....630.....640.....650.....660	

Species	Sequence	Position
Pavo_muticus	TNTLQLSSKQIDLQNKRLPSVNASQIQLGRRNSRGSPK-ACRSKVPKESCSSEPEQSEGH	698
Pavo_cristatus	TNTLQLSSKQIDLQNKRLPSVNASQIQLGRRNSRGSPK-ACRSKVPKESCSSEPEQSEGH	698
Gallus_gallus	ASTLQLSNKQIDLQNKRLPSVNASQIQLGRRNSRGSPK-ACRSKVPKESCSLSEPEQSEGH	698
Anas_platyrhynchos	TSILQLPNKQTDIQSKRPLSLASQIQPGRTSRGSPK-ACHNKGTPKETCPSEPEQSDGH	698
Chelonia_mydas	TSTPQLSSKQIDVHSYRLFCSISQNGAGKNNRGSPA-TSQNKTTPEKCLSAELPGEDH	693
Rhinatrema_bivittatum	PSIPLPLASNPSDGHSRN-----LRSQAKESKI-NSPKKSFPKVRCQSAELHSEES	684
Bos_taurus	QSRAPSKQPPCSDKAQGP-----ERKACRRSPGRRSPSRAPQKEQQLSSDLQRTPE	686
Pteropus_alecto	QSWGPSKQPPASNTAQGP-----EQRACRRSPGRRSPSRALQKEQPLSPDLQRTPE	692
Equus_caballus	QSGAPGKQPPPRDVAQDCD-----EQGAGRGFPGGGSPSRAPKKRQHLSPDMQGTDP	687
Pan_troglodytes	QSRAPSKQPPAGNVAQGP-----EPRDSRGSPG-GSLGGALQKEQHVVSSDLQGTNS	685
Macaca_mulatta	QSRAPSKQPPAGNVAQGP-----EPRDSRGSPG-GSLGGALQKEQYASSDLQGTNS	685
Homo_sapiens	QSRAPSKQPPAGNVAQGP-----EPRDSRGSPG-GSLGGALQKEQHVVSSDLQGTNS	685
Callithrix_jacchus	QSRAPSKRSPAGNVSGGP-----EPRDSRGSPG-GSLGGALQKEQHVVSSDLQGTNS	685
Mus_musculus	QDATPSKQPPASHTVQSP-----DPEHSR-PPG-RCPGRASQGDSS--SIDLQGTAS	688
Ornithorhynchus_anatinus	RTREAPRLPGGPEAAPGP-----PARESRRGESPGVPGGTITAGRERGLSPPEPRGADR	694
Xenopus_tropicalis	QITNEIVHEWHGEAVGNS-----EDRECDHVDNKNIEPKHLKH	663

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      ..      :      .*: :      :      :
Pavo_muticus      NIHQELLRKHIKSKPSCVHFHCGKAKEVTKVEAKHQVAAATELNGKKHKEHAVEANGTSA      758
Pavo_cristatus    NIHQELLRKHIKSKPSCVHFHCGKAKEVTKVEAKHQVAAATELNGKKHKEHAVEANGTSA      758
Gallus_gallus     NIHQELLRKHIKSKPSCVHFHCGKAKEVTKVEAKHQVAAATELNGKKHKEHAVEANGTSA      758
Anas_platyrhynchos KIRQELSRKHHSKPSACVHFHCGKAEVTKVEAKHQVAAATEVDGEKHREHTIKANGTSA      758
Chelonia_mydas    KNQKELSRKHHSKPSACVHFHCGKENDGAKVEANHQVAAATEWYGEKHKEQTASEKG-LA      752
Rhinatrema_bivittatum RRKKELSRKHHSKPSACVHFHCGKENDGAKVEANHQVAAATEWYGEKHKEQTASEKG-LA      743
Bos_taurus        RKPNETAREHSKGRSACVHFSPSEGSNGNRPG---VCPAEKPRGETAGEQH-CDKGKGS      742
Pteropus_alecto   RKPNETSREHSKGRSSCVHFSPSEGSNGNRPG---VSSVDKSRGETVGEQH-CDKGKGF      748
Equus_caballus    RKPNETSREHSKGRSACVHFSPSEGSNGNRPG---VPSVERSRGETVGEQR-CDKGKGF      743
Pan_troglodytes   RRPNETAREHSKGQSACVHFSPNEGSNGSRHPG---VRSVEKSRGETAGNEQ-CAKGKGF      741
Macaca_mulatta    RRPNETAREHSKGQSACVHFSPNEGSNGSRHPG---APSVEKSRGETAGDQR-CAKGKGF      741
Homo_sapiens      RRPNETAREHSKGQSACVHFSPNEGSNGSRHPG---VPSVEKSRGETAGDER-CAKGKGF      741
Callithrix_jacchus RRPNETAREHSKGQSACVHLRPSGNDGNRHPG---VPSVEKSRGETAGDQR-CKKGKGF      741
Mus_musculus      RKPSETPIEHCRGPSACVHFRSWEKGNSSKNQG---TSSVEKRRGETNGKHRRCEEGPS      745
Ornithorhynchus_anatinus RKKKETFGKLSQSKYPCIHFAAKEGVEEDKPRP---ITAAVSSEGDGRGQQ-TLGGSGT      750
Xenopus_tropicalis LEQNSKPTGKNORRTACVQSSPPENENINSVQT-----RISPSGTSN      705
      .....730.....740.....750.....760.....770.....780

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      .
Pavo_muticus      RGN---RRHASACGTAGAGEKTRDQSQSSSGNRGHCEGNSVVVCNVSCAGGIARNSKRCE      815
Pavo_cristatus    RGN---RRHASACGTAGAGEKTRDQSQSSSGNRGHCEGNSVVVCNVSCAGGIARNSKRCE      815
Gallus_gallus     HGN---RRHASACGTAGAGEKTRDQSLSSSGNRGHCEGTSVVVCNVSCAGGIARNSKRCE      815
Anas_platyrhynchos RGN---RRHASACRTASAGEKLQDQSQSSSGNRDNSEGNSVFVCSVSCAGGVARSCKQCE      815
Chelonia_mydas    HGN---EKHIPCCNTASAGEKLADQSQSIAGNRSHCEGTIGRLQININCTDGNRSNRQCE      809
Rhinatrema_bivittatum CGS---RSHVCSSKSYTTREMLDQTQTVFVSSGHFENTISGLEHISFSDNSSRNPRPSE      800
Bos_taurus        SKQ-----PSHVKGAGPDAGEEPPSWAATSLPQQ-----DSHWKASRRQD      782
Pteropus_alecto   LKQ-----PSCIRVARPDENGDDPSWAAASLQQ-----DGHRKPSRRHD      788
Equus_caballus    LKQ-----PSCLKGAGPEERGEDPSGAAASLPQQ-----DGHRKPVQRHH      783
Pan_troglodytes   VKQ-----PSCIRVAGPDEKGEDSRRAAASLPFH-----DSHWKPSRRHD      781
Macaca_mulatta    VKQ-----PSCIRVAGPDEKGEDSRRAAASLPFH-----DSHWKPSRRHD      781
Homo_sapiens      VKQ-----PSCIRVAGPDEKGEDSRRAAASLPFH-----DSHWKPSRRHD      781
Callithrix_jacchus LKQ-----PSCIRVAGPDEK-EDSRRAAASLPFH-----GGHWKPSRRHE      780
Mus_musculus      ARO-----PLCTGSGRPAEKGEDSPAVASASQQ-----DHPRKPNKRQD      785
Ornithorhynchus_anatinus LAQGNPRRDPCDRTARRRDATEDQRAANPPGGRTRK-----FPDPGWPDGSGPPARPE      804
Xenopus_tropicalis AQS-----SSLGNETPIEMNWDNPSHKHTQNR-----RISRHRM      740
      .....790.....800.....810.....820.....830.....840

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      :      .      :      .      :      .      :
Pavo_muticus      AVP-KGKRHQKQSIHKEVNDERCSGAGSSRPGSAAKAVFVNTRNATVRAIEHANNVGNNEL      874
Pavo_cristatus    AVP-KGKRHQKQSRHKEVNDERCSGAGSSRPGSAAKAVFVNTRNATVRAIEHANNVGNNEL      874
Gallus_gallus     AVP-KSKRHQKQSRHKEVNYERCSGAGSSRPGSAAKVVFVNTRNATVCAIEHANNVGNHEL      874
Anas_platyrhynchos AVP-KGKRHQKQSRHKEVNDERCSGAGSSRPGSAAKTVFVNTRNATVSHAVEQTNVGNNEL      874
Chelonia_mydas    TLS-KGKPRTLKARNKELNSERCSPAGSSRPGSAAKMRNVNIRNDSHAVVQINNVANNEL      868
Rhinatrema_bivittatum SNKSETKSKQKAMNKELNGGQCSGAGSSRSGSARISFLITRSS--ARTHAQORVAANEL      858
Bos_taurus        AAP-KAMRASQKRRSQELRGGRSPAGSSRPGSAAKGEVVHFGQSPLHHRTPRNTVTQDKL      841
Pteropus_alecto   TAP-KAKCASQKRRIQELRGGRSPAGSSRPGSAAKGEVVHAGQNPPLHHRTPRNVKTQDKL      847
Equus_caballus    PAP-KAKGASQKRHLQELRGGRSPAGSSRPGSAAKGEVGHAGQNPPLHHRTPRNVKTQDKP      842
Pan_troglodytes   TEP-KAKCAPQKRRTQELKGGRCSPAGSSRPGSARGEAVHAGQNPPLHHRTPRNVKTQAKL      840
Macaca_mulatta    PEP-KAKCAPQKRRTQELKGGRCSPAGSSRPGSARGEAVHAGQNPPLHHRTPRNVKTQAKL      840
Homo_sapiens      TEP-KAKCAPQKRRTQELKGGRCSPAGSSRPGSARGEAVHAGQNPPLHHRTPRNVKTQAKL      840
Callithrix_jacchus TEP-KAKCAPQKRRTQELKGGRCSPAGSSRPGSARGEVVHAGQNPPLHHRTPRNVKTQAKL      839
Mus_musculus      RAA-RPRGASQKRRTQELKGGRCSPAGSSRPGSAAKGEVACADQSSLHHRTPRNVKTQDKL      843
Ornithorhynchus_anatinus LPA-KGKSSRPKGRSKELQGGRCSPAGSSRPGSAAKLGVDTRSDG-----ARDGVQRSKL      858
Xenopus_tropicalis ESP---DVVVHRIEDLIQKESRKKSREERKGSHRQRESNDNRLCVSERETSNSVITTEE      797
      .....850.....860.....870.....880.....890.....900

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Pavo_muticus      AKKTSPLLDSTDETESTGTGPRNPATCSAPDDSLNLEKTGEVGSRNADDQLRS-VVWQSTNI 933
Pavo_cristatus    AKKTSPLLDSTDETESTGTGPRNPATCSAPDDSLNLEKTGEVGSRNADDQLRS-VVWQSTNI 933
Gallus_gallus     AKKTSPLLDSTDETESTGTGPRNPAAACSDSLNLEKTGEVGSRSAGDQLCS-VAWQSTNI 933
Anas_platyrhynchos AKKPSPLLSAETESTRTMPRNPAAACSDSLNLEKTGIIGSRNADDQLCS-VAWQSTNI 933
Chelonia_mydas    AKKTCPLLSIKAGTTTRPVPSDPAHTIFNDSLNEKTDITGSKNADDQLCSHLTCQSMNI 928
Rhinatrema_bivittatum ESNAPVLPPIEVESMSLGSQNLAMQNLNDALNSGKPEGMRYQSIDDRMCSLTWQNLNI 918
Bos_taurus        AGGTSSDLPPESTEVLRSQVRLGTSARSEDTRLPKET-----DPAPGPLPGQTVNI 892
Pteropus_alecto   EGEMHSDLPQSTEVLRSQVRLGISTLSEDAQVPKET-----DPAPGPHSVQSVNI 898
Equus_caballus    AGGIHSDSPQSAEVLRSQVRLSGTSTLSEDAQISKET-----DPAAGPLSGQSVNM 893
Pan_troglodytes   TGGLYSDLPQSTEELRSQARRLETSTLSKDFQVSKET-----DPAPGPLSGQSVNI 891
Macaca_mulatta    AGGLYSDLPQSTEELRSQARRLETSTLSEDFQVSKET-----DPVPG-LSGQSVNI 890
Homo_sapiens      TGGLYSHLPQSTEELRSQARRLETSTLSEDFQVSKET-----DPAPGPLSGQSVNI 891
Callithrix_jacchus AGGLYSDLPQSTEELRSQAQRLGTSTLSEDFQESKET-----DPAPGPLSGQSVNI 890
Mus_musculus      IGGVSSGLPLSTEASRSQCKQ-----LYEDICASPET-----GVAHGPPPGQCMNI 889
Ornithorhynchus_anatinus AAGECPGRVGPFPATAASPKQGTAPCPPLPAVGPAPA-----GAPSATPPGQGVNI 909
Xenopus_tropicalis ERKKKG--TKKGRRRIATGTSKTCACSEGVRLSQSEKE-----SRVVIQGRADCI 844
.....910.....920.....930.....940.....950.....960

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Pavo_muticus      ELIPLEIRMQIIIEKERTRKELFRKKNYAATVIQRTWRSYHLRQELSQLLSAKRQKED 993
Pavo_cristatus    ELIPLEIRMQIIIEKERTRKELFRKKNYAATVIQRTWRSYHLRQELSQLLSAKRQKED 993
Gallus_gallus     ELIPLEIRMQIIIEKERTRKELFRKKNYAATVIQRTWRSYHLRQELSQLLSAKRQKED 993
Anas_platyrhynchos ELIPLEIRMQIIIEKERTRKELFRKKNYAATVIQRTWRSYHLRQELFRLLGAKRQCK-DED 992
Chelonia_mydas    ELIPVEIRMQIIIEKERTRKELFRKKNYAATVIQRTWRSYQLRQKLVLQFSAERQCKED 988
Rhinatrema_bivittatum EIIPVEMRLQIIIEKERVRLQFRKKNKAAATVIQRTWRGYQLRQKLFLSTKKQNKEDT 978
Bos_taurus        DLLPVELRLQIIQRRERSRKELFRKKNKAAAVIQRAWRSYQLRKHLSHLLHVKQLGARDMD 952
Pteropus_alecto   DLLPVELRLQIIQKERSRKELFRKNKAAAVIQRAWRSYQLRKHLSHLLHMKORGARDKD 958
Equus_caballus    DLLPMELRLQIIQRRERSRKELFRKKNKAAAVIQRAWRSYQLRKHLSHLLHMKQLGAGMD 953
Pan_troglodytes   DLLPVELRLQIIQRRERRRKELFRKKNKAAAVIQRAWRSYQLRKHLSHLRHMKQLGAGVD 951
Macaca_mulatta    DLLPVELRLQIIQRRERRRKELFRKKNKAAAVIQRAWRSYQLRKHLSHLRHMKQLGAGVD 950
Homo_sapiens      DLLPVELRLQIIQRRERRRKELFRKKNKAAAVIQRAWRSYQLRKHLSHLRHMKQLGAGVD 951
Callithrix_jacchus DLLPVELRLQIIQRRERRRKELFRKKNKAAAVIQRAWRSYQLRKHLSHLQHMQLGAGMD 950
Mus_musculus      HLLPVEQRLIIQRRERSRKELFRKKNKAAAVIQRAWRSYQLRKHLRLLHLKQLGAREVL 949
Ornithorhynchus_anatinus ELIPLERLQIIIEKERTRKELFRKNRAATAIQRAWRRYRLRRQLSRSLGAQPPRKEDED 969
Xenopus_tropicalis TSPEPCETPSRVCREKKSSAKKEQRLPTEHKKPPGMAYQSSSALKSSMSRHTRQTSDS 904
.....970.....980.....990.....1000.....1010.....1020

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Pavo_muticus      KWRQETA AFLIRVAWKKQLNHSPQKSVPSCKNLKSVNKTSSAIKTSKQ-SILKQIYGRSQ 1052
Pavo_cristatus    KWRQETA AFLIRVAWKKQLNHSPQKSVPSCKNLKSVNKTSSAIKTSKQ-SILKQIYGRSQ 1052
Gallus_gallus     KWRQETA AFLIRVAWKKQLNHSPQKSVPSCKNLKSVNKTSSAIKTSKQ-SILKQIYGRSQ 1052
Anas_platyrhynchos KWSQEA AAFLLQVAWKKQLNHSPKSAVPSCKTLKPVSKTSSAIKTSKQ-SILKQIYGRSQ 1051
Chelonia_mydas    KWRQETA AFFI QVAWKKQLNHGPKSVSSCKNLKSINKSNSAIKTSKQ-SILKQIYGRSQ 1047
Rhinatrema_bivittatum RLKHEA AAFLLIRVIWKKELNHSSLPVSECKNHRMS-MNFALKANKQPS TLKQIYAGNQ 1037
Bos_taurus        RWNRECLALILQV-WRKELELKPPKTMVSKTTKSPPKGSSGTPKTRH-SVLKQIYG-SQ 1009
Pteropus_alecto   RWNRECLITLLQV-WRKELELKSPKTTTTSRITKNPSKSSSGTKSNRH-SVLKQIYGCSQ 1016
Equus_caballus    RWNRECMVLLQV-WRKELELVKPKIIPVSRITKSPSKGISGTPKSTRH-SVLKQIYGCSQ 1011
Pan_troglodytes   RWRQETALLLQV-WRKELELKFPQTAVSKAPKSPSKGTSKSTKH-SVLKQIYGCSH 1009
Macaca_mulatta    RWRQETALLLQV-WRKELELKFPQTAVSKAPKSPSKGTSKSTKH-SVLKQIYGCSH 1008
Homo_sapiens      RWRQETALLLQV-WRKELELVKPKTTAVSKAPKSPSKGTSKSTKH-SVLKQIYGCSH 1009
Callithrix_jacchus RWRQETALLLQV-WRKELELVKPKTTAVSKAPKSPSKGTSKSTKH-SVLKQIYGCSH 1008
Mus_musculus      RCTQVCTALLLQV-WRKELELVKPKTSISVSRITKSPSKGSSATKYARH-SVLKQIYGCSQ 1007
Ornithorhynchus_anatinus GWRQETA ALFQVAWKKELNRGPPQSGPTGANPNRPSRSGSAVKPSRQ-SVLKQIYGCKQ 1028
Xenopus_tropicalis KYLDSPMASYVGFG-----ESIKPLSPMVLREGNLTSNWQNVDIELIPL EARLQLVEREK 959
.....1030.....1040.....1050.....1060.....1070.....1080

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Pavo_muticus      EGRVYQPARPPSKLKLSDVQLVSVNNLQYVNNLLENMGKAKQFSYNMRPSTAAKSKSTRLE 1112
Pavo_cristatus    EGRVYQPARPPSKLKLSDVQLVSVNNLQYVNNLLENMGKAKQFSYNMRPSTAAKSKSTRLE 1112
Gallus_gallus     EGRVYQPARPPSKLKLSDVQLVSVNNLQYVNNLLENMGKAKQFSYNMRPSTAAKSKSTRLE 1112
Anas_platyrhynchos EGKGCQPARPPSKLKLSEVPLVSVNNLQYVNNLLENMGRSKQFSYNMRPTTAAKSKSTRVK 1111
Chelonia_mydas    EGKVCHPARPPSSKHKLSDVHMSVSNLQYVHLLLENMGKAKQFSYNMRPTTAAKSKTKRPK 1107
Rhinatrema_bivittatum WNE----- 1040
Bos_taurus        EGKVRQPTRSSKAHSLVGLNS--VSNLQCIHLLKNSGKSQNFSSYNLQSANPSRNKCLKLR- 1066
Pteropus_alecto   EGKVHHPTTRSSKAHSLVRLNS--VSNLQCIHLLNSGRSKNFSSYNLQSATQSKRKTCLR- 1073
Equus_caballus    EGKVHHPTTRSSKAHSLVRLNS--VSNLQYIHLSENSGRSKNFSSYNLQSAIQSKNKTAKS- 1068
Pan_troglodytes   EGKIHHPTRSVKASSVLRLNS--GKAATAKQMVGKNMGKHFPLFHPQRQKTLEQRWPGFS 1067
Macaca_mulatta    EGKIHHPTRSVKASSVLRLNS--GKAVTAKQTVGENMGKRFPSFHPQRQKTLAQRWPGFS 1066
Homo_sapiens      EGKIHHPTRSVKASSVLRLNS--VSNLQCIHLLNSGRSKNFSSYNLQSATQPKNKTKP-- 1065
Callithrix_jacchus EGKIHHPTRSIKAPSVLRLNS--VSNLQCIHLLNSGRSKNFSSYNLQSATLPKNKTKP-- 1065
Mus_musculus      EGKGHHPIKSSKAPAVLHLSS--VSNLQSIHLN-NSGRSKKFSYNLQPSQSKNKPCL-- 1062
Ornithorhynchus_anatinus EGKLHHPKSKASKPKLLAAQQVP-VNNLRNIHLLLEDTGKSQSFSSYNMRPATAVKGRRAKAP 1087
Xenopus_tropicalis ARKQLFQRKNHAATVIQKAWR-----TWISKSRYRTRHGHQAQSNPSAMV----- 1004
.....1090.....1100.....1110.....1120.....1130.....1140

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Pavo_muticus      H----- 1113
Pavo_cristatus    H----- 1113
Gallus_gallus     H----- 1113
Anas_platyrhynchos H----- 1112
Chelonia_mydas    H----- 1108
Rhinatrema_bivittatum ----- 1040
Bos_taurus        ---LPKE-EDCARGARIAADFKFSD 1088
Pteropus_alecto   ---PPT-EDCQGELO- 1085
Equus_caballus    ---TACGGRLCPGALE- 1081
Pan_troglodytes   NGHLISWDYYCSQHLSP----- 1084
Macaca_mulatta    NGHLISWDYYCSQHLSP----- 1083
Homo_sapiens      ----- 1065
Callithrix_jacchus ---VPMEEDCVQGIWHS- 1079
Mus_musculus      ----- 1062
Ornithorhynchus_anatinus -----SLREKE----- 1093
Xenopus_tropicalis ----- 1004
.....1150.....1160.....

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