

CLUSTAL 2.1 MULTIPLE SEQUENCE ALIGNMENT

File: /media/morpheus/disk1/fst/pep_msa/SMS Date: Tue Feb 1 14:36:51 2022

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Pavo_muticus	-----MAAARHST-----LDFMLGATA-----DCNAVLKALQP	28
Pavo_cristatus	-----MAAARHST-----LDFMLGATA-----DCNAVLKALQP	28
Gallus_gallus	-----MAAARHST-----LDFMLGATA-----DCNAVLKALQP	28
Chelonia_mydas	----MAAAAAHST-----LDFLLSAPA-----DCNAVLKGLQP	30
Mus_musculus	-----MAAARHST-----LDFKLGAKA-----DGEAILKGLQS	28
Rattus_norvegicus	-----MAAARHST-----LDFTLGAKA-----DGEAILKGLQS	28
Homo_sapiens	-----MAAARHST-----LDFMLGAKA-----DGETILKGLQS	28
Callithrix_jacchus	-----MAAARHST-----LDFMLGAKA-----DGETILKGLQS	28
Macaca_mulatta	MSLSKGVAAAGPHDTSPILEAECSECVQNAEATHFOEKQLCFNPKSIATDGETILKGLQS	60
Bos_taurus	-----MAAARHST-----LDFMLGAKA-----DGETILKGLQS	28
Equus_caballus	-----MAAARHST-----LDFMLGAKA-----DGETILKGLQS	28
Latimeria_chalumnae	-----MAAAMRHHT-----LDFTLRGTA-----DGNVLKGLQP	29
Rhinatrema_bivittatum	-----MAAVQONT-----LDFQLSVTA-----DGNLTKDLQP	28
Xenopus_tropicalis	1.....10.....20.....30.....40.....50.....60	
*::: :***** *:***: **: ** * :*: :		
Pavo_muticus	VFQEQGMTETVHNWEDHGYLATYIKKNGSFANLRIHPHGLVLVDLQSYSDHTKGREETDQ	88
Pavo_cristatus	VFQEQGMTETVHNWEDHGYLATYIKKNGSFANLRIHPHGLVLVDLQSYNDHTKGREETDQ	88
Gallus_gallus	VFQEQGMTETVHNWEDHGYLATYIKKNGSFANLRIHPHGLVLVDLQSYNDHTKGREETDQ	88
Chelonia_mydas	VFQEQGMTETIHNWEDHGYLATYINKNGSFANLRIYPHGLVLVDLQSHSDDIKGRDEIDH	90
Mus_musculus	IFQEQGMTESVHTWQDHGYLATYTNKNGSFANLRIYPHGLVLVDLQSYSDVQKQETDS	88
Rattus_norvegicus	IFQEQGMAESVHTWQDHGYLATYTNKNGSFANLRIYPHGLVLVDLQSYSDVQKQETDC	88
Homo_sapiens	IFQEQGMAESVHTWQDHGYLATYTNKNGSFANLRIYPHGLVLVDLQSYDGAQKKEIDS	88
Callithrix_jacchus	IFQEQGMAESVHTWQDHGYLATYTNKNGSFANLRIYPHGLVLVDLQSYDGAQKKEIDS	88
Macaca_mulatta	IFQEQGMAESVHTWQDHGYLATYTNKNGSFANLRIYPHGLVLVDLQSYDGAQKKEIDS	120
Bos_taurus	IFQEQGMTESVHTWQDHGYLATYINKNGSFANLRIYPHGLVLVDLQSYDGAQKKE-VDS	87
Equus_caballus	IFQEQGMTESVHTWQDHGYLATYINKNGSFANLRIYPHGLVLVDLQSYSDAQKKE-VDS	87
Latimeria_chalumnae	-----MTETVHYLQEHGYLATYLDKNGSFALRIHLHGFVSLDQCEGDCQEQNSVEK	54
Rhinatrema_bivittatum	VFQEQEMTEAIYSWEDHGYLATYVKNKNGSFASLRIYPHGSVLMDLQSF--TEGKEKAH	87
Xenopus_tropicalis	IFQEQGMTETVHAWEDHGYLATYTGKKGSFATVRIYPHGLVLIDVQCRD-EPEEKASVHK	87
.....70.....80.....90.....100.....110.....120		
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Pavo_muticus	LLNKVEERMKEFFHGNLKRVRKRLPPIIRGGVIDRYWPTADGRLVEYDIDEVVYDEDSPFQ	148
Pavo_cristatus	LLNKVEERMKEFFHGNLKRVRKRLPPIIRGGVIDRYWPTADGRLVEYDIDEVVYDEDSPFQ	148
Gallus_gallus	LLNKVEERMKEFFHGNLKRVRKRLPAILRGGVIDRYWPTADGRLVEYDIDEVVYDEDSPFQ	148
Chelonia_mydas	LLNKIEERMKEFFHGNLKRVRKRLPATVRGGAIDRYWPTADGRLVEYDIDEVVYDEESPYQ	150
Mus_musculus	LLNKIEERMKEFSQDSTGRVKRLPPIVRGGAIDRYWPTADGRLVEYDIDEVVYDEDSPYQ	148
Rattus_norvegicus	LLNKIEERMKEFSQDSTGRVKRLPPIVRGGAIDRYWPTADGRLVEYDIDEVVYDEDSPYQ	148
Homo_sapiens	ILNKVEERMKEFSQDSTGRVKRLPPIVRGGAIDRYWPTADGRLVEYDIDEVVYDEDSPYQ	148
Callithrix_jacchus	ILNKVEERMKEFSQDSTGRVKRLPPIVRGGAIDRYWPTADGRLVEYDIDEVVYDEDSPYQ	148
Macaca_mulatta	ILNKVEERMKEFSQDSTGRVKRLPPIVRGGAIDRYWPTADGRLVEYDIDEVVYDEDSPYQ	180
Bos_taurus	LLNKVEERMKEFSQDSTGRVKRLPPIVRGGAIDRYWPTADGRLVEYDIDEVVYDEDSPYQ	147
Equus_caballus	LLNKVEERMKEFSQDSTGRVKRLPPIVRGGAIDRYWPTADGRLVEYDIDEVVYDEDSPYQ	147
Latimeria_chalumnae	LLRKVEGRMKDLFQNGIKLVKSLPALMRGESVDRLATADGRIMEYDFDEVLYDENSPYQ	114
Rhinatrema_bivittatum	LLNKLEERMKEFSQDSTGRVKRLPPIVRGGAIDRYWPTADGRLVEYDIDEVVYDEESPYQ	147
Xenopus_tropicalis	ILSKIEERMKEFSQDSTGRVKRLPPIVRGASVDRYWPTADGRLVEYDIDEIVSKESPYQ	147
.....130.....140.....150.....160.....170.....180		
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Pavo_muticus	NIKILHSKQFGNIIILSGDVNLAESDLAYTRAIMSGKEDYTGKEVLILGGDGGILYEI	208
Pavo_cristatus	NIKILHSKQFGNIIILSGDVNLAESDLAYTRAIMSGKEDYTGKEVLILGGDGGILYEI	208
Gallus_gallus	NIKILHSKQFGNIIILSGDVNLAESDLAYTRAIMSGKEDYTGKEVLILGGDGGILYEI	208
Chelonia_mydas	NIKILHSKQFGNIIILSGDVNLAESDLAYTQAIMSGKEDFTGKEVLILGGDGGILYEI	210
Mus_musculus	NIKILHSKQFGNIIILSGDVNLAESDLAYTRAIMSGKEDYTGKDVILILGGDGGILCEI	208
Rattus_norvegicus	NIKILHSKQFGNIIILSGDVNLAESDLAYTRAIMSGKEDYTGKDVILILGGDGGILCEI	208
Homo_sapiens	NIKILHSKQFGNIIILSGDVNLAESDLAYTRAIMSGKEDYTGKDVILILGGDGGILCEI	208
Callithrix_jacchus	NIKILHSKQFGNIIILSGDVNLAESDLAYTRAIMSGKEDYTGKDVILILGGDGGILCEI	208
Macaca_mulatta	NIKILHSKQFGNIIILSGDVNLAESDLAYTRAIMSGKEDYTGKDVILILGGDGGILYEI	240
Bos_taurus	NIKILHSKQFGNIIILSGDVNLAESDLAYTRAIMSGKEDYTGKDVILILGGDGGILCEI	207
Equus_caballus	NIKILHSKQFGNIIILSGDVNLAESDLAYTRAIMSGKEDYTGKDVILILGGDGGILCEI	207
Latimeria_chalumnae	NIKVLHSKQYGNIIILSGDVNLAESDLAYTQAIMSGKEDYTGKEVLILGGDGGILCEL	174
Rhinatrema_bivittatum	NIKILHSKQFGNIIILSGDVNLAESDLAYTQAIMSGKEDYTGKEVLILGGDGGILYEM	207
Xenopus_tropicalis	NIKIMHSKQFGNIIILSGDVNLAESDLAYTQAIMSGKEDYTGKEVLILGGDGGILYEL	207
.....190.....200.....210.....220.....230.....240		

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Pavo_muticus      VKLKPKMVTMVEIDQMVIDGCKKYMRRKTCGDVLDNLKGECYQVLIEDCIPVLKRYAKEGR 268
Pavo_cristatus    VKLKPKMVTMVEIDQMVIDGCKKYMRRKTCGDVLDNLKGECYQVLIEDCIPVLKRYAKEGR 268
Gallus_gallus     VKLKPKMVTMVEIDQMVIDGCKKYMRRKTCGDVLDNLKGECYQVLIEDCIPVLKRYAKEGR 268
Chelonia_mydas    VKLKPKMVTMVEIDQMVIDGCRKYMRRKTCGDVLDNLKGECYQVLIEDCIPVLKRYAKEGR 270
Mus_musculus      VKLKPKMVTMVEIDQMVIDGCKKYMRRKTCGDVLDNLRGDCYQVLIEDCIPVLKRYAKEGR 268
Rattus_norvegicus VKLKPKMVTMVEIDQMVIDGCKKYMRRKTCGDVLDNLKGDCYQVLIEDCIPVLKRYAKEGR 268
Homo_sapiens      VKLKPKMVTMVEIDQMVIDGCKKYMRRKTCGDVLDNLKGDCYQVLIEDCIPVLKRYAKEGR 268
Callithrix_jacchus VKLKPKMVTMVEIDQMVIDGCKKYMRRKTCGDVLDNLKGDCYQVLIEDCIPVLKRYAKEGR 268
Macaca_mulatta    VKLKPKMVTMVEIDQMVIDGCKKYMRRKTCGDVLDNLKGDCYQVLIEDCIPVLKRYAKEGR 300
Bos_taurus        VKLKPKMVTMVEIDQMVIDGCKKYMRRKTCGDVLDNLKGDCYQVLIEDCIPVLKRYAKEGR 267
Equus_caballus    VKLKPKMVTMVEIDQMVIDGCKKYMRRKTCGDVLDNLKGDCYQVLIEDCIPVLKRYAKEGR 267
Latimeria_chalumnae VKLKPKMVTMVEIDQMVIDGCRKYMRRKTCGDVLDNLKGDCYQVLIEDCIPVLKRYAKEGR 234
Rhinatrema_bivittatum VKLKPKMVTMVEIDQMVIDGCRKYMRRKTCGDVLDNLKGDCYQVLIEDCIPVLKRYAKEGR 267
Xenopus_tropicalis VKLNPKMVTMVEIDQMVIDGCRKHMRRKTCGDVLDNLKGDCYQVLIEDCIPVLKRYAKEGR 267
.....250.....260.....270.....280.....290.....300

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Pavo_muticus      MFDYVINDLTAVPISTSPPEEDSTWEFLRLILDLSMKVLKQDGKYFTQGCNINLTALTLY 328
Pavo_cristatus    MFDYVINDLTAVPISTSPPEEDSTWEFLRLILDLSMKVLKQDGKYFTQGCNINLTALTLY 328
Gallus_gallus     MFDYVINDLTAVPISTSPPEEDSTWEFLRLILDLSMKVLKQDGKYFTQGCNINLTALTLY 328
Chelonia_mydas    MFDYVINDLTAVPISTSPPEEDSTWEFLRLILDLSMKVLKQDGKYFTQGCNINLTALTLY 330
Mus_musculus      EFDYVINDLTAVPISTSPPEEDSTWDFLRLILDLSMKVLKQDGKYFTQGCNINLTALTLY 328
Rattus_norvegicus EFDYVINDLTAVPISTSPPEEDSTWEFLRLILDLSMKVLKQDGKYFTQGCNINLTALTLY 328
Homo_sapiens      EFDYVINDLTAVPISTSPPEEDSTWEFLRLILDLSMKVLKQDGKYFTQGCNINLTALTLY 328
Callithrix_jacchus EFDYVINDLTAVPISTSPPEEDSTWEFLRLILDLSMKVLKQDGKYFTQGCNINLTALTLY 328
Macaca_mulatta    EFDYVINDLTAVPISTSPPEEDSTWEFLRLILDLSMKVLKQDGKYFTQGCNINLTALTLY 360
Bos_taurus        EFDYVINDLTAVPISTSPPEEDSTWEFLRLILDLSMKVLKQDGKYFTQGCNINLTALTLY 327
Equus_caballus    EFDYVINDLTAVPISTSPPEEDSTWEFLRLILDLSMKVLKQDGKYFTQGCNINLTALTLY 327
Latimeria_chalumnae TFDYVINDLTAVPISTSPPEEDSTWEFLRLILDLSMKVLKQDGKYFTQGCNINLTALTLY 294
Rhinatrema_bivittatum MFDYVINDLTAVPISTSPPEEDSTWEFLRLILDLSMKVLKQDGKYFTQGCNINLTALTLY 327
Xenopus_tropicalis TFDYVINDLTAVPISTSPPEEDSTWEFLRLILDLSMKVLKQDGKYFTQGCNINLTALTLY 327
.....310.....320.....330.....340.....350.....360

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Pavo_muticus      EEQLSRLYCPVEFSKEIVCVPSYMELEWVFYTIWKKQTEV----- 367
Pavo_cristatus    EEQLSRLYCPVEFSKEIVCVPSYMELEWVFYTIWKKQTEV----- 367
Gallus_gallus     EEQLSRLYCPVEFSKEIVCVPSYMELEWVFYTIWKKQTEV----- 367
Chelonia_mydas    EEQLGRLYCPVEFSKETVCVPSYMELEWVFYTIWKKQTEV----- 390
Mus_musculus      EEQLGRLYCPVEFSKEIVCVPSYMELEWVFYTIWKKQTEV----- 366
Rattus_norvegicus EEQLGRLYCPVEFSKEIVCVPSYMELEWVFYTIWKKQTEV----- 366
Homo_sapiens      EEQLGRLYCPVEFSKEIVCVPSYMELEWVFYTIWKKQTEV----- 366
Callithrix_jacchus EEQLGRLYCPVEFSKEIVCVPSYMELEWVFYTIWKKQTEV----- 366
Macaca_mulatta    EEQLGRLYCPVEFSKEIVCVPSYMELEWVFYTIWKKQTEV----- 398
Bos_taurus        EEQLGRLYCPVEFSKEIVCVPSYMELEWVFYTIWKKQTEV----- 365
Equus_caballus    EEQLGRLYCPVEFSKEIVCVPSYMELEWVFYTIWKKQTEV----- 365
Latimeria_chalumnae EEQLGRLYCPVEFSKEIVCVPSYMELEWVFYTIWKKQTEV----- 329
Rhinatrema_bivittatum EEQLNRLLCPVEFSKETVCVPSYMELEWVFYTIWKKQTEV----- 366
Xenopus_tropicalis EEQLNRLLCPVEFSKETVCVPSYMELEWVFYTIWKKQTEV----- 366
.....370.....380.....390.....400.....410.....420

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Pavo_muticus      ----- 367
Pavo_cristatus    ----- 367
Gallus_gallus     ----- 367
Chelonia_mydas    AAPPSPQSLIPSTCLCLCPFTLMIIFPPWSK 421
Mus_musculus      ----- 366
Rattus_norvegicus ----- 366
Homo_sapiens      ----- 366
Callithrix_jacchus ----- 366
Macaca_mulatta    ----- 398
Bos_taurus        ----- 365
Equus_caballus    ----- 365
Latimeria_chalumnae ----- 329
Rhinatrema_bivittatum ----- 366
Xenopus_tropicalis ----- 366
.....430.....440.....450.

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