CLUSTAL 2.1 MULTIPLE SEQUENCE ALIGNMENT

File: /media/morpheus/disk1/fst/pep_msa/HPGD6eps Tue Feb
 1 12:21:29 2022 Page 1 of 2

	** *.* ***.** **.** **.*.	
Pavo muticus	MPNYKLTYFNLRGRAEISRYLFAYSGIKYEDHRL	34
Pavo cristatus	BPNYKLTYFNLRGRAEISRYLFAYSGIKYEDHRL	34
Gallus_gallus	MPNYKLTYFNLRGRAEICRYLFAYAGIKYEDHRL	34
Chelonia mydas	MFLAAVWSSYIPPEQRSIMPHYKLTYFNLRGRAEIIRYLFAFSGIKYEDHRI	52
Mus musculus	MPNYKLLYFNMRGRAEIIRYIFAYLDIKYEDHRI	34
—	MPNYKLLYFNMRGRAEIIRYIFAYLDIKYEDHRI	34
Rattus_norvegicus		
Homo_sapiens	MPNYKLTYFNMRGRAEIIRYIFAYLDIQYEDHRI	34
Pan_troglodytes	MPNYKLTYFNMRGRAEIIRYIFAYLDIQYEDHRI	34
Macaca_mulatta	MPNYKLTYFNMRGRAEIIRYIFAYLDIQYEDHRI	34
Callithrix_jacchus	MPNYKLTYFNMRGRAEIIRYIFAYLDIEYEDHRI	34
Canis_lupus_familiaris	MPKYKLIYFNMRGRAEIIRYIFAYLDIKYEDHRI	34
Equus_caballus	MKPSCSHVRGHRRYWRLHRDAAQNHTMPNYKLTYFNMRGRAEIIRYIFAYLDIKYEDHRI	60
Bos_taurus		39
Heterocephalus_glaber	MPNYKLIYFNMRGRAEIIRYIFAYLDIKYEDHRI	34
Xenopus_tropicalis	MPSYTLKYFNLEGRGEILRYLFSYSDIPFEDQRI	34
	1102030405060	
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Pavo muticus	EGVDWPKIKPTIPFGKVPILEVDGVIIHOSLAIARYLARESGLAGOTPVEQALADAIVDT	94
_		94
Pavo_cristatus	EGADWPKIKPTIPFGKVPILEVDGVIIHQSLAIARYLARESGLAGQTPVEQALADAIVDT	_
Gallus_gallus	EGADWPKIKPTIPFGKVPILEVDGVIIHQSLAIARYLARESGLAGQTPVEQALADAIVDT	94
Chelonia_mydas	EQADWPKIKPTIPFGKIPILEVDGVTLHQSLAIARYLAKETGLAGQTPLEQALVDAIVDT	112
Mus_musculus	EQADWPKIKPTLPFGKIPVLEVEGLTIHQSLAIARYLTKNTDLAGKTALEQCQADAVVDT	94
Rattus_norvegicus	EQADWPKIKPTLPFGKIPVLEVEGLTLHQSLAIARYLTKNTDLAGKTELEQCQVDAVVDT	94
Homo_sapiens	EQADWPEIKSTLPFGKIPILEVDGLTLHQSLAIARYLTKNTDLAGNTEMEQCHVDAIVDT	94
Pan_troglodytes	EQADWPEIKSTLPFGKIPILEVDGLTLHQSLAIARYLTKNTDLAGNTEMEQCHVDAIVDT	94
Macaca_mulatta	EQADWPEIKSTLPFGKIPILEVDGLTLHQSLAIARYLTKNTDLAGNTEMEQCQVDAIVDT	94
Callithrix jacchus	EQADWPEIKSTLPFGKIPILEVDGLTLHQSLAIARYLTKNTDLAGKTEMEQCQVDAIVDT	94
Canis_lupus_familiaris	EQTDWPEVKSTLPFGKIPILEVDGLNLHQSLAIARYMTKNTDLAGKTELEQCQVDAIVDT	94
Equus_caballus	EQADWPEIKSALPFGKIPILEVDGLNLHQSLAIARYLTRNTDLAGKTELEQCEVDAIVDT	120
Bos taurus	EQADWPEIKSTLPFGKIPILEVDGLNLHQSLAIARYLTRNTDLAGKTELEQCQVDAIVDT	99
Heterocephalus_glaber	EQADWPEIKSTLPFGKIPILEVDGLKLHQSLAIARYLTKTTDLAGKTATEQWQVDAMVDT	94
Xenopus_tropicalis	EFADWPALKPKIPYGQLPVVEIDGVIYNQSLAVGRYLAKKGGLIGKNDLDEIRVDALIDT	94
Aeliopus_clopicalis	708090100110120	24
	**** ***	
Pavo_muticus	IDDFMILFPWAEKNQDVREKAFNDILTNKAPELLKDLDAFLGDNKWFVGKS-VTWADFYW	153
Pavo_cristatus	IDDFMILFPWAEKNQDVREKAFNDILTNKAPELLKDLDAFLGDNKWFVGKS-VTWADFYW	153
Gallus_gallus	IDDFMMLFPWAEKNQDVKEKAFNDILTNKAPELLKDLDTFLGDKKWFVGKS-VTWADFYW	153
Chelonia_mydas	IDDFMSMFPWGEKNQDVKQQVFNDLLTNTAPGLLRDLESFLGDKKWLVGKT-VTWADFYW	171
Mus_musculus	LDDFMSLFPWAEKDQDLKERMFNELLTHQAPRLLKDLDTYLGDKEWFIGNY-VTWADFYW	153
Rattus_norvegicus	LDDFMSLFPWAEENQDLKERTFNDLLTRQAPHLLKDLDTYLGDKEWFIGNYQVTWADFYW	154
Homo_sapiens	LDDFMSCFPWAEKKQDVKEQMFNELLTYNAPHLMQDLDTYLGGREWLIGNS-VTWADFYW	153
Pan troglodytes	LDDFMSCFPWAEKKQDVKEQMFNELLTYNAPHLMQDLDTYLGGREWLIGNS-VTWADFYW	153
Macaca mulatta	LDDFMSCFPWAEKKQDVKEQMFNELLTYNAPHLMQDLDTYLGGKEWLIGNS-VTWADFYW	153
Callithrix jacchus	LDDFMSCFPWAEKKODVKEOMFNELLTYTAPHLMODLDTYLGGKEWLIGNS-VTWADFYW	153
Canis lupus familiaris	LDDFMSRFPWAEKNQDIKDQMFNELLTYDGPHLLQDLDTYLGEKEWLIGDS-VTWADFYW	153
Equus_caballus	LDDFMSRFPWAEKRQDIKDQTFNELLTYDAPHLLQDLDTYLGEKEWLIGNS-VTWADFYW	179
Bos taurus	LDDFMSRFPWTEKRQDIKNQIFKELLTCDAPPLLQNLDTYLGENEWLIGDS-VTWADFYW	158
Heterocephalus_glaber	LDDFMSRFPWAEKKQEVKNQIFNELLTCEAPHLLQDLETYLGDKEWFIGDS-VTWADFYW	153
Xenopus tropicalis	IDDFFSKFPWMDTEKAKKEFMEKSGPQLLSYLEKTLGNNSWFVGDS-VTWADFYW	148
vellobus_tropicails		148
	130140150160170180	

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File: /media/morpheus/disk1/fst/pep_msa/HPGD6epsTue Feb 1 12:21:29 2022 Page 2 of 2

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Pavo_muticus	$\mathbf{D}^{\mathbf{V}}$	CS1	'TL	L <mark>TYK</mark> A	D <mark>LAD</mark> F	(YPR	LLA	LRD	RVζ	QAL.	PAI	LWA	QKRP	KTTI	199
Pavo_cristatus	Dν	CS1	'TL	L <mark>TYK</mark> A	DLAD F	(Y <mark>P</mark> R	LLA	LRD	RV	QAL:	PAI?	LWA	QKRP	KTTI	199
Gallus_gallus	Dν	CS1	'TL	LSYKA	DLAD F	(Y <mark>P</mark> R	LLA	LRD	RV	AL	PAI?	LWA	QKRP	KTAI	199
Chelonia_mydas	Dν	CS1	'TL	LFLKP	DL <mark>T</mark> D	1 <mark>YP</mark> R	L <mark>S</mark> A	LKE	RVζ	AL.	PAI	[WA	QQRF	KTTL	217
Mus_musculus	DΙ	CS1	'TL	LVL <mark>KP</mark>	GLLD]	Y <mark>P</mark> K	LVS	LRN	KVζ	[IA	PAI	IWA <mark>:</mark>	LKRP	QTKL	199
Rattus_norvegicus	DI	CS1	'TL	LVL <mark>KP</mark>	DLLG	Y <mark>P</mark> R	LV <mark>S</mark>	LRN	KVζ	ZAI	PAI	EWA <mark>S</mark>	LKRP	QTKL	200
Homo_sapiens	ΕI	CS1	'TL	LVF <mark>KP</mark>	DLLD	I <mark>HP</mark> R	LV <mark>T</mark>	LRK	KVζ	ZAI	PAV	EWN2	KRRP	QTKL	199
Pan_troglodytes	ΕI	CS1	'TL	LVF <mark>KP</mark>	DLL <mark>D</mark> N	I <mark>HP</mark> R	LV <mark>T</mark>	LRK	KVζ	ZAI	PAI	EWN2	KRRP	QTKL	199
Macaca_mulatta	ΕI	CS1	'TL	LVF <mark>KP</mark>	DLLD]	HPR	LV <mark>T</mark>	LRK	KVζ	[IA	PAI?	LWN1	KRRP	QTKL	199
Callithrix_jacchus	ΕI	CS1	'TL	LVYKP	DLLD]	HPR	LV <mark>S</mark>	LLK	KVζ	[IA	PAI?	LWN1	KRRP	QTKL	199
Canis_lupus_familiaris	ΕI	CS1	'TL	LVFKP	DLLD]	HPR	LV <mark>T</mark>	LRK	KVζ	[IA	PAI	YDM1	QQRF	QTKL	199
Equus_caballus	ΕI	CS1	'TL	LVF <mark>KP</mark>	DLLD	/HPR	LV <mark>T</mark>	VRK	KVζ	[IA	PAI	YDM1	QRRF	QTRL	225
Bos_taurus	ΕI	CS1	'TL	LVFKS	DLLD]	HPR	LV <mark>T</mark>	LRK	KVζ	SI	PAI	IW	LRRP	QTKL	204
<pre>Heterocephalus_glaber</pre>	DΙ	CS1	'TL	LVFKP	GLL NN	IC <mark>P</mark> R	LQ <mark>T</mark>	LRK	KVζ	[IA	PAI?	IW D	QRRP	QTKL	199
Xenopus_tropicalis	DT	CSI	SF	ENYVP	<mark>GFA</mark> KI	Y <mark>P</mark> K	LLA	LKD	RV	(AI	PAI?	LWA	KKRP	KKAH	194
				190		200		• • •	. 21	LO.		2	220	• • • •	