CLUSTAL 2.1 MULTIPLE SEQUENCE ALIGNMENT

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Pavo muticus	*::*: ** : * .* *.:: .:::** : * ** *** *	53
Pavo cristatus	MEVVLHYRPHORDLTELOKFAEAAVKEFPVROLPRFTPWFPNDLYRLPLKPKK	53
Gallus gallus	MEMVLHYRPHQRDLTELQKFAEAAVKEFPIRQLPRFTPWFPNDLCRLPLKPKK	53
Anas_platyrhynchos	MEVVLHYRPHOKDLIELOKIAOAAVKDFPIROLPRFTPWFPSDLCRLPLKPKK	53
Taeniopygia_guttata	MEVVLHCRPHORDLINLOKLAEAAVKEFPIROLPRFAPWFSNDLRRLPLKPKK	53
Chelonia mydas	MEVVLHYRPFQNDLTKLQKLVEETLKEFPIRQLPRFVPWFPNDSHKLPLKPKR	53
Homo_sapiens	MTTEVILHYRPCESDPTQLPKIAEKAIQDFPTRPLSRFIPWFPYDGSKLPLRPKR	55
Callithrix_jacchus	mttevilhyrpyesdptolpkiaekaiodfpvrplsrfipwfpydgsklplrpkr	55
Canis_lupus_familiaris	MTTEVILHYRPYENDPTQLLKIAEKAIQDFPTRPLTRFIPWFLHDGSKLPLKPKR	55
Mus_musculus	MDSCRMTTEVILHYRPYENDPKQLAKIAENVIQDFPTHPLPRFIPWFPYDESKLPLKPER	60
Rattus_norvegicus	MDYCRMTTEVILHYRPYENDPKQLAKIAENVIQDFPTHPLSRFIPWFPHDESKLPLKPKR	60
Sarcophilus_harrisii	MSTEVVLYYRPCESDPTRLYKVAEEAINEFPTRPLLRFIPWFPNDVIKLPLKPKR	55
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	.*:** * *:.:.: : **	
Pavo_muticus	.*:** * *:::: : **	113
Pavo_muticus Pavo_cristatus	QPPVISSEEAEELKQLSTPSEYIVESPNYDCTKNLLEFQSDVNHVQTLIHTQNGHRQINL	113
Gallus_gallus	QPPVISSEEAEELKQLSTPSEYIVGSPNYDCTKNLLEFQSDVNHGQTLIHTQNGHRQINL	113
Anas_platyrhynchos	QPPVISSEARELKQLSSPSEYIVGSPSYDCTKNLPEFQSNVNHGQTLVQTQNVHRPVNL	113
Taeniopygia guttata	QAPVISCEEAEELKQLSTPSEYVAGSPDYDCTKNLLEFHSSMKHGPTLIQAQAVHKPINL	113
Chelonia_mydas	QPPIISGEKAEEVKQLVAASEPLIG-QHYDCTVDLLEFQSNLKTGQSLIQTQTVHAQIHS	112
Homo sapiens	SPPVISEEAAEDVKQYLTISEHDAKSHSYDCTVDLLEFQPSLKK-QHLTWSHTLKEQTNS	114
Callithrix_jacchus	SPPVISGEAAEDVKQYLTISEHNAKSHSYDCTVDLLEFQPYLKQ-QRLIWSQTLKKQTNS	114
	SPPVISEEAAEDVKQYLTISEHDAKSQSYDCTVDLLEFQPNLKKRKHLIRSHSLNEQTNC	115
Mus musculus	L <mark>PP</mark> VISEEAAESVKQYLAISEPGVKSQSYDCTVDLLEFQPSSKL-QHFIQSHTVKEQTNA	119
Rattus_norvegicus	L <mark>PPVISEEAAENVKRYLTISEPNGESHSYDCT</mark> VDLLEFQPNSKM-QHLLQAHTLKEQTNA	119
Sarcophilus_harrisii	L <mark>PPIISGEAANEVDQHFTISEH</mark> HRKAQN <mark>YDCT</mark> VGLPEFQPNLEKMKCLTRAQILDEQISC	115
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Pavo_muticus	ENQ <mark>GEPP</mark> SNGKQKLKRSWSVSLCSPKLKEKILPLSQELQNNLERLKLHAFYRAKWTIERS	173
Pavo_cristatus	ENQGEPPSNGKQKLKRSWSVSLCSPKLKEKILPLSQELQNNLERLKLHAFYRAKWTIERS	173
Gallus_gallus	ENQGEPPSNGKQKLKRSWSVSLCSPKLKEKILPLSQELQNNLERLKLHAFYRAKWTIERS	173
Anas_platyrhynchos	ENQGEPPSNGEHKLKRSWSVSVHSPKLKEKILPLSRELQNSLERLKLHAFYRAKWTIGQS	173
Taeniopygia_guttata	EN <mark>QGEPPSNGEHKLKRSWSVSVHSP</mark> KLK <mark>EK</mark> ILPLSRELONSLERLKLHAFYRAKWTIGQS DYQGEPPSNEDKKLKRSWSVSLPRAKLKEKIHPLSQELONNLERLKLHAFCRAKWTIEQS	173 173
Taeniopygia_guttata Chelonia_mydas	EN <mark>QGEPPSNGEHKLKRSWSVSVHSP</mark> KLKEKILPLSRELONSLERLKLHAFYRAKWTIGQS DYQGEPPSNEDKKLKRSWSVSLPRAKLKEKIHPLSQELONNLERLKLHAFCRAKWTIEQS SNLEVQPANEKPKLRRSWSISVPSPKLKEKILPLSRELOSNLERLKLHAFYRAKWTIEQS	173 173 172
Taeniopygia_guttata Chelonia_mydas Homo_sapiens	ENQGEPPSNGEHKLKRSWSVSVHSPKLKEKILPLSRELONSLERLKLHAFYRAKWTIGQS DYQGEPPSNEDKKLKRSWSVSLPRAKLKEKIHPLSQELONNLERLKLHAFCRAKWTIEQS SNLEVQPANEKPKLRRSWSISVPSPKLKEKILPLSRELOSNLERLKLHAFYRAKWTIEQS GNLGKQSEKGKOHKRRSWSISLPSNNCTKNVSPLSKKLODSLKALNLHSLYRARWTIEHT	173 173 172 174
Taeniopygia_guttata Chelonia_mydas Homo_sapiens Callithrix_jacchus	ENQGEPPSNGEHKLKRSWSVSVHSPKLKEKILPLSRELONSLERLKLHAFYRAKWTIGQS DYQGEPPSNEDKKLKRSWSVSLPRAKLKEKIHPLSQELONNLERLKLHAFCRAKWTIEQS SNLEVQPANEKPKLRSWSISVPSPKLKEKILPLSRELOSNLERLKLHAFYRAKWTIEQS GNLGKQSEKGKOHKRRSWSISLPSNNCTKNVSPLSKKLODSLKALNLHSLYRARWTIEHT GNLDKQSEKGKOYNRSWSISLPGNNCTEKVYPLSKKLODSLKALNLHSLYRARWTIEDT	173 173 172 174 174
Taeniopygia_guttata Chelonia_mydas Homo_sapiens Callithrix_jacchus Canis_lupus_familiaris	ENQGEPPSNGEHKLKRSWSVSVHSPKLKEKILPLSRELONSLERLKLHAFYRAKWTIGQS DYQGEPPSNEDKKLKRSWSVSLPRAKLKEKIHPLSQELONNLERLKLHAFCRAKWTIEQS SNLEVQPANEKPKLRSWSISVPSPKLKEKILPLSRELOSNLERLKLHAFYRAKWTIEQS GNLGKQSEKGKOHKRRSWSISLPSNNCTKNVSPLSKKLODSLKALNLHSLYRARWTIEHT GNLDKQSEKGKOYNRRSWSISLPGNNCTEKVYPLSKKLODSLKALNLHSLYRARWTIEDT GNLDKQSEKGROHKKRFWSVSLPNSNCTENIFPLSKKLODSLKALNLHSLYRARWTIEHA	173 173 172 174 174 175
Taeniopygia_guttata Chelonia_mydas Homo_sapiens Callithrix_jacchus Canis_lupus_familiaris Mus_musculus	ENQGEPPSNGEHKLKRSWSVSVHSPKLKEKILPLSRELONSLERLKLHAFYRAKWTIGQS DYQGEPPSNEDKKLKRSWSVSLPRAKLKEKIHPLSQELONNLERLKLHAFCRAKWTIEQS SNLEVQPANEKPKLRSWSISVPSPKLKEKILPLSRELOSNLERLKLHAFYRAKWTIEQS GNLGKQSEKGKOHKRRSWSISLPSNNCTKNVSPLSKKLODSLKALNLHSLYRARWTIEHT GNLDKQSEKGKOYNRRSWSISLPGNNCTEKVYPLSKKLODSLKALNLHSLYRARWTIEDT GNLDKQSEKGROHKKRFWSVSLPNSNCTENIFPLSKKLODSLKALNLHSLYRARWTIEHA AHLDKNSGKEKOHKORSWSVSLASSHCPEKIFPLSRKLOASLRTLHLHSFHRARWTLEYS	173 173 172 174 174 175 179
Taeniopygia_guttata Chelonia_mydas Homo_sapiens Callithrix_jacchus Canis_lupus_familiaris Mus_musculus Rattus_norvegicus	ENQGEPPSNGEHKLKRSWSVSVHSPKLKEKILPLSRELONSLERLKLHAFYRAKWTIGQS DYQGEPPSNEDKKLKRSWSVSLPRAKLKEKIHPLSQELONNLERLKLHAFCRAKWTIEQS SNLEVQPANEKPKLRSWSISVPSPKLKEKILPLSRELOSNLERLKLHAFYRAKWTIEQS GNLGKQSEKGKQHKRRSWSISLPSNNCTKNVSPLSKKLQDSLKALNLHSLYRARWTIEHT GNLDKQSEKGKQYNRRSWSISLPGNNCTEKVYPLSKKLQDSLKALNLHSLYRARWTIEDT GNLDKQSEKGKQYNRRSWSISLPGNNCTEKVYPLSKKLQDSLKALNLHSLYRARWTIEHA AHLDKNSGKEKQHKRFWSVSLPNSNCTENIFPLSKKLQDSLKALNLHSLYRARWTIEHA AHLDKNSGKEKQHKQRSWSVSLASSHCPEKIFPLSRKLQASLRTLHLHSFHRARWTLEYS ANLDKNSGKETQHKKRSWSVSLTSKHCPKKIFPLSRKLQATLKTLHLHTLHRARWTLEYS	173 173 172 174 174 175 179
Taeniopygia_guttata Chelonia_mydas Homo_sapiens Callithrix_jacchus Canis_lupus_familiaris Mus_musculus	ENQGEPPSNGEHKLKRSWSVSVHSPKLKEKILPLSRELONSLERLKLHAFYRAKWTIGQS DYQGEPPSNEDKKLKRSWSVSLPRAKLKEKIHPLSQELONNLERLKLHAFCRAKWTIEQS SNLEVQPANEKPKLRSWSISVPSPKLKEKILPLSRELOSNLERLKLHAFYRAKWTIEQS GNLGKQSEKGKOHKRRSWSISLPSNNCTKNVSPLSKKLODSLKALNLHSLYRARWTIEHT GNLDKQSEKGKOYNRRSWSISLPGNNCTEKVYPLSKKLODSLKALNLHSLYRARWTIEDT GNLDKQSEKGROHKKRFWSVSLPNSNCTENIFPLSKKLODSLKALNLHSLYRARWTIEHA AHLDKNSGKEKOHKORSWSVSLASSHCPEKIFPLSRKLOASLRTLHLHSFHRARWTLEYS	173 173 172 174 174 175 179
Taeniopygia_guttata Chelonia_mydas Homo_sapiens Callithrix_jacchus Canis_lupus_familiaris Mus_musculus Rattus_norvegicus	ENQGEPPSNGEHKLKRSWSVSVHSPKLKEKILPLSRELONSLERLKLHAFYRAKWTIGQS DYQGEPPSNEDKKLKRSWSVSLPRAKLKEKIHPLSQELONNLERLKLHAFYRAKWTIEQS SNLEVQPANEKPKLRSWSISVPSPKLKEKILPLSRELOSNLERLKLHAFYRAKWTIEQS GNLGKQSEKGKQHKRRSWSISLPSNNCTKNVSPLSKKLODSLKALNLHSLYRARWTIEHT GNLDKQSEKGKQYNRRSWSISLPGNNCTEKVYPLSKKLODSLKALNLHSLYRARWTIEDT GNLDKQSEKGRQHKKRFWSVSLPNSNCTENIFPLSKKLODSLKALNLHSLYRARWTIEHA AHLDKNSGKEKQHKQRSWSVSLASSHCPEKIFPLSRKLOASLRTLHLHSFHRARWTLEYS ANLDKNSGKETQHKKRSWSVSLTSKHCPKKIFPLSRKLOASLRTLHLHTLHRARWTLEYS GNPDEQTKKTKRHLKRSWSVSVS-RNFTKKVLPLSKELOQNLEKLKLHSLYRARWTIEQS130140150160170180	173 173 172 174 174 175 179
Taeniopygia_guttata Chelonia_mydas Homo_sapiens Callithrix_jacchus Canis_lupus_familiaris Mus_musculus Rattus_norvegicus Sarcophilus_harrisii	ENQGEPPSNGEHKLKRSWSVSVHSPKLKEKILPLSRELONSLERLKLHAFYRAKWTIGQS DYQGEPPSNEDKKLKRSWSVSLPRAKLKEKIHPLSQELONNLERLKLHAFCRAKWTIEQS SNLEVQPANEKPKLRSWSISVPSPKLKEKILPLSRELOSNLERLKLHAFYRAKWTIEQS GNLGKQSEKGKOHKRRSWSISLPSNNCTKNVSPLSKKLODSLKALNLHSLYRARWTIEHT GNLDKQSEKGKQYNRRSWSISLPGNNCTEKVYPLSKKLODSLKALNLHSLYRARWTIEHT GNLDKQSEKGROHKKRFWSVSLPNSNCTENIFPLSKKLODSLKALNLHSLYRARWTIEHA AHLDKNSGKEKOHKORSWSVSLASSHCPEKIFPLSRKLOASLRTLHLHSFHRARWTLEYS ANLDKNSGKETOHKKRSWSVSLTSKHCPKKIFPLSRKLOASLRTLHLHTLHRARWTLEYS GNPDEQTKKTKRHLKRSWSVSVS-RNFTKKVLPLSKELOONLEKLKLHSLYRARWTIEQS130140150160170180	173 173 172 174 174 175 179 179
Taeniopygia_guttata Chelonia_mydas Homo_sapiens Callithrix_jacchus Canis_lupus_familiaris Mus_musculus Rattus_norvegicus Sarcophilus_harrisii Pavo_muticus	ENQGEPPSNGEHKLKRSWSVSVHSPKLKEKILPLSRELONSLERLKLHAFYRAKWTIGQS DYQGEPPSNEDKKLKRSWSVSLPRAKLKEKIHPLSQELONNLERLKLHAFCRAKWTIEQS SNLEVQPANEKPKLRSWSISVPSPKLKEKILPLSRELOSNLERLKLHAFYRAKWTIEQS GNLGKQSEKGKOHKRRSWSISLPSNNCTKNVSPLSKKLODSLKALNLHSLYRARWTIEHT GNLDKQSEKGKOYNRRSWSISLPGNNCTEKVYPLSKKLODSLKALNLHSLYRARWTIEHT GNLDKQSEKGROHKKRFWSVSLPNSNCTENIFPLSKKLODSLKALNLHSLYRARWTIEHA AHLDKNSGKEKOHKORSWSVSLASSHCPEKIFPLSRKLOASLRTLHLHSFHRARWTLEYS ANLDKNSGKETOHKKRSWSVSLTSKHCPKKIFPLSRKLOASLRTLHLHTLHRARWTLEYS GNPDEOTKKTKRHLKRSWSVSVS-RNFTKKVLPLSKELOONLEKLKLHSLYRARWTIEQS130140150160170180 *.***:* *** :*::.*** ****:**::**:********	173 173 172 174 174 175 179 174
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CLUSTAL 2.1 MULTIPLE SEQUENCE ALIGNMENT

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Pavo_muticus	D <mark>KMN</mark> LLVHKFGIIFSL	249
Pavo_cristatus	D <mark>KMN</mark> LLV <mark>HK</mark> FGIIF <mark>S</mark> L	249
Gallus_gallus	D <mark>KMN</mark> LHVHKFGIIF <mark>S</mark> L	249
Anas_platyrhynchos	N <mark>KMN</mark> LLVHKFGIIF <mark>S</mark> L	249
Taeniopygia_guttata	D <mark>KMN</mark> LLV <mark>HKYG</mark> IIF <mark>S</mark> L	249
Chelonia_mydas	GRMNLLVHKYGIIF <mark>S</mark> L	248
Homo_sapiens	<mark>GK</mark> I <mark>N</mark> LFVHKYGVIF <mark>S</mark> M	250
Callithrix_jacchus	GKI <mark>N</mark> LSVHKYGVIFSM	250
Canis_lupus_familiaris	GKMNLFMHKYGVIFSM	251
Mus_musculus	GKIDLFVHKYGVIFSM	255
Rattus_norvegicus	GKIDLFVHKYGVIF <mark>S</mark> M	255
Sarcophilus_harrisii	GKMNLFVHKYGVIFSM	250
	250	