

Table S2. Thirty-four different CHMP4 protein sequences from 19 different metazoan species grouped together with the human CHMP4 isoform with which they show the greatest pair-wise identity throughout the entire protein

CHMP4 protein	Organism	NCBI protein accession no.	Overall identity to most homologous human CHMP4, %	C-terminal sequence
4A	<i>Homo sapiens</i>	Q9BY43	100	PKVDEDEEAL KQLAE WVS
4A	<i>Pan troglodytes</i>	XP_001169270	99(A)	PKVDEDEEAL KQLAE WVS
4A	<i>Canis familiaris</i>	XP_537387	91(A)	PEADEDEAAL KQLAE WVS
4A	<i>Bos taurus</i>	AAI33472	91(A)	PKADEDEAAL KQLAE WVS
4A	<i>Monodelphis domestica</i>	XP_001380207	81(A)	ASKTDEEKE EMKQLVD WVS
4B	<i>Homo sapiens</i>	NP_789782	100	KKKEEEDDD MKELEN WAGSM
4B	<i>Mus musculus</i>	NP_083638	99(B)	KKKEEEDDD MKELEN WAGSM
4B	<i>Macaca mulatta</i>	XP_001105255	99(B)	KKKEEEDDD MKELEN WAGSM
4B	<i>familiaris</i>	XP_542966	97(B)	KKKEEEDDD MKELEN WAGSM
4B	<i>Bos taurus</i>	AAI23448	97(B)	KKKEEEDDD MKELET WAGTI
4B	<i>Rattus norvegicus</i>	XP_001073409	97(B)	KKKEEEDDD MKELEN WAGSM
4B	<i>Monodelphis domestica</i>	XP_001381361	96(B)	KKKEEEDDD MKELEN WAGSM
4B	<i>Ornithorhynchus anatinus</i>	XP_001518785	94(B)	KKKEEEDDD MKELEN WAGSM
4B	<i>Equus caballus</i>	XP_001499057	94(B)	KKKEEEDDD MKELEN WAGTI
4B	<i>Gallus gallus</i>	NP_001006286	91(B)	KKKEEEDDD MKELEA WAGNM
4B	<i>Xenopus laevis</i>	Q5XGW6	87(B)	KKQEEDDDD MRELEN WATA
4B	<i>Xenopus tropicalis</i>	Q6GL11	87(B)	KKQEEDDDD MRELEN WATA
4B	<i>Danio rerio</i>	Q7ZVC4	86(B)	KKKEEEDDD MKDELA WAAN
4B	<i>Nematostella vectensis</i>	XP_001639344	67(B)	AKKKTEDDDD LAELEA WAS
4B	<i>Ornithodoros moubata</i>	AA559855	66(B)	SKAVMEDP DMIELA QWAS
4B	<i>Anopheles gambiae</i>	XP_315330	64(B)	AVAEEDDP DMKELM SWAN
4B	<i>Caenorhabditis elegans</i>	AAA68771	61(B)	PRAKEADK DLLEDL ESWAN
4B	<i>Drosophila melanogaster</i>	NP_610462	57(B)	AVEDDDDP DMKQLL SWSN
4C	<i>Homo sapiens</i>	Q96CF2	100	QRAEEEDDD IKQLAA WAT
4C	<i>Pan troglodytes</i>	XP_528179	99(C)	RRAEEEDDD IKQLAA WAT
4C	<i>Macaca mulatta</i>	XP_001093735	98(C)	RRAEEEDDD IKQLAA WAT
4C	<i>Canis familiaris</i>	XP_535115	88(C)	SKRTEEVDD IKQLAA WAP
4C	<i>Bos taurus</i>	AAI13332	88(C)	RRTEGEDDD IQHLAA WAT
4C	<i>Monodelphis domestica</i>	XP_001367000	88(C)	SRRKEEDDD IKQLAA WAS
4C	<i>Equus caballus</i>	XP_001489156	87(C)	RRAEEEDDD IKKLSA WAT
4C	<i>Mus musculus</i>	Q9D7F7	84(C)	SRRAEEDDD FKQLAA WAT
4C	<i>Rattus norvegicus</i>	Q569C1	84(C)	SRRAEEDDD FKQLAA WAT
4C	<i>Gallus gallus</i>	XP_418312	72(C)	RRRVEEDDD MKQLAA WAS
4C	<i>Xenopus laevis</i>	Q6GNN8	69(C)	SKKVEDDDD MQMLAA WAT

Conserved hydrophobic, Leu, and Trp positions in the terminal recognition helix are in bold. For reference, pairwise identities between the three human CHMP4 isoforms are 62% (A vs. B), 52% (A vs. C), and 61% (B vs. C), whereas the nearest identity between a human CHMP4 protein and another human CHMP protein is 30% (CHMP4A vs. CHMP5). Note that our current nomenclature for CHMP4A (NCBI protein accession locus Q9BY43), CHMP4B (NP_789782), and CHMP4C (Q96CF2) matches the current NCBI database annotations (www.ncbi.nlm.nih.gov/sites/entrez) but that the designations of CHMP4A and CHMP4B are reversed from those used in several previous publications.