

Figure S4. Multiple alignment of GH23 motif sequences.

tr	Accession	Protein Name	Sequence
			10
tr	P84503	P84503_ANSCY	NGFGLMQVDK
tr	P84504	P84504_RHEAM	NGFGLMQVDR
tr	Q5FW09	Q5FW09_XENTR	NAFGLMQVDK
tr	Q5XK71	Q5XK71_XENLA	NAFGLMQVDK
tr	Q1M163	Q1M163_GADMO	NGFGLMQVDK
tr	B9TU22	B9TU22_GADMO	NGFGLMQVDK
tr	A6PYF4	A6PYF4_GADMO	NGFGLMQVDK
tr	A6PYF3	A6PYF3_GADMO	IGFGLMQVDK
tr	C1BHT6	C1BHT6_ONCMY	NGFGLMQVDK
tr	C1BHK0	C1BHK0_ONCMY	NGFGLMQVDK
tr	C1BGU6	C1BGU6_ONCMY	NGFGLMQVDK
tr	A6PZ97	A6PZ97_SALSA	KGFGLMQVDK
tr	B5XET9	B5XET9_SALSA	KGFGLMQVDK
tr	B5XAN4	B5XAN4_SALSA	KGFGLMQVDK
tr	B5XCN8	B5XCN8_SALSA	KGFGLMQVDK
tr	B5XDU9	B5XDU9_SALSA	KGFGLMQVDK
tr	B5X9P5	B5X9P5_SALSA	KGFGLMQVDK
tr	B5XA96	B5XA96_SALSA	KGFGLMQVDK
tr	C1BW35	C1BW35_ESOLU	NGFGLMQVDK
tr	Q0KFS4	Q0KFS4_SALSA	KGFGLMQVDK
tr	C1BL43	C1BL43_OSMMO	NGFGLMQVDK
tr	Q6DH80	Q6DH80_DANRE	NGFGLMQVDK
tr	B5AFK7	B5AFK7_LABRO	NGFGLMQVDK
tr	A3KP47	A3KP47_DANRE	NGFGLMQVDK
tr	B5AC75	B5AC75_CTEID	YAFGLMQIDK
tr	C3XXG2	C3XXG2_BRAFL	NGYGLMQVDI
tr	C3XXG0	C3XXG0_BRAFL	NGYGLMQVDI
tr	C3YR54	C3YR54_BRAFL	NGFGLMQIDR
tr	B3RIZ1	B3RIZ1_TRIAD	NGYGLMQVDK
tr	Q08NK4	Q08NK4_STIAU	NGFGLMQVDK
tr	A8D9Q3	A8D9Q3_LARCR	NAWGLMQVDV
tr	A8D9Q7	A8D9Q7_LARCR	NAWGLMQVDV
tr	Q5XU03	Q5XU03_SINCH	NGWGLMQVDV
tr	A7M774	A7M774_9PLEU	NAWGLMQVDV
tr	B1B725	B1B725_SOLSE	NAWGLMQVDV
tr	A8D3J6	A8D3J6_LATCA	KAWGLMQVDV
tr	B2RFG5	B2RFG5_SPAAU	NAWGLMQVDV
tr	Q4RZR7	Q4RZR7_TETNG	KAWGLMQVDV
tr	B9ELT2	B9ELT2_SALSA	KAFGLMQIDT
tr	C1BF55	C1BF55_ONCMY	RGFGLMQVDV
tr	C1BQ11	C1BQ11_9MAXI	NAFGLMQVDK
tr	C1BHE7	C1BHE7_ONCMY	NAFGLMQVDK
tr	B2ZSY1	B2ZSY1_ANAPL	NAFGLMQVDK
tr	C3YYL0	C3YYL0_BRAFL	NGFGLMQVDK
tr	D2HDC7	D2HDC7_AILME	LKFGLMQLDK
tr	A5PJT9	A5PJT9_BOVIN	LKFGLMQLDK
tr	C9J4J0	C9J4J0_HUMAN	LKFGLMQLDK
tr	C9JBA4	C9JBA4_HUMAN	LKFGLMQLDK
tr	Q496G2	Q496G2_HUMAN	LKFGLMQLDK
tr	D2HDC6	D2HDC6_AILME	DGIQVQVQ-DP
tr	Q53RV9	Q53RV9_HUMAN	DRTSMVQ-DP
tr	Q0VE18	Q0VE18_MOUSE	SGLQMVK-ET
tr	Q4T499	Q4T499_TETNG	NCFGLMQINK
tr	Q7YXC1	Q7YXC1_OIKDI	YGWGLMQVDR
tr	Q7YXC2	Q7YXC2_OIKDI	YGWGLMQVDR
tr	Q7YXC3	Q7YXC3_OIKDI	YGWGLMQVDR
tr	Q075V3	Q075V3_9BIVA	HAYGILQCDI
tr	Q2HNY7	Q2HNY7_AEQIR	HAYGILQCDI
tr	C4TJC8	C4TJC8_CRAGI	NAYGIMQCDV
tr	C3ZH25	C3ZH25_BRAFL	NGWGLMQVDK
tr	B0TES1	B0TES1_HELMI	-ARGLMQLMP
tr	C0GKJ2	C0GKJ2_9FIRM	-ALGLMQLMP
tr	C5VQ07	C5VQ07_CLOBO	-AIGLMQLTP
tr	A7VZ93	A7VZ93_9CLOT	-ARGLMQIMP
tr	D2Z7E0	D2Z7E0_9BACT	-ASGLMQLMP
tr	Q0VPM5	Q0VPM5_ALCBS	-AQGLMQLMP
tr	B4X1W0	B4X1W0_9GAMM	-AQGLMQLMP
tr	Q2BMQ9	Q2BMQ9_9GAMM	-AQGLMQLMP
tr	B5JXR2	B5JXR2_9GAMM	-AQGLMQLMP
tr	Q1ZHF2	Q1ZHF2_9GAMM	-AMGLMQLMP
tr	C8NDD9	C8NDD9_9GAMM	-AMGLMQLMP
tr	C7LR87	C7LR87_DESBD	-AQGLMQIMP

tr	B8DI65	B8DI65_LISMH	-ATGLMQLMA
tr	Q92DT7	Q92DT7_LISIN	-ATGLMQLMY
tr	Q722I0	Q722I0_LISMF	-ATGLMQLMY
tr	C1L0Z8	C1L0Z8_LISMC	-ATGLMQLMY
tr	C8K7E6	C8K7E6_LISMO	-ATGLMQLMY
tr	Q4ELS3	Q4ELS3_LISMO	-ATGLMQLMY
tr	Q4EU87	Q4EU87_LISMO	-ATGLMQLMY
tr	D2PAV5	D2PAV5_LISMO	-ATGLMQLMY
tr	D2NZI0	D2NZI0_LISMO	-ATGLMQLMY
tr	C8K9V3	C8K9V3_LISMO	-ATGLMQLMY
tr	C8JY83	C8JY83_LISMO	-ATGLMQLMY
tr	Q8Y925	Q8Y925_LISMO	-ATGLMQLMY
tr	Q8GMY2	Q8GMY2_LISMO	-ATGLMQLMY
tr	A0AGH2	A0AGH2_LISW6	-ATGLMQLMY
tr	O64046	O64046_BPSPC	-AMGLMQLMP
tr	B1HNX9	B1HNX9_LYSSC	-AQGLMQLMP
tr	A3IFZ4	A3IFZ4_9BACI	-AQGLMQLMP
tr	Q9K900	Q9K900_BACHD	-ASGLMQLMP
tr	Q3AF19	Q3AF19_CARHZ	-AMGLMQLMP
tr	C8W6G7	C8W6G7_DESAS	-ALGLTQLMP
tr	C0QET8	C0QET8_DESAH	-VRGLMQVTT
tr	B8FJF4	B8FJF4_DESAA	-VKGLMQITR
tr	B3QU47	B3QU47_CHLT3	-AKGLMQVVP
tr	Q11RC3	Q11RC3_CYTH3	-ACGLMQVMP
tr	Q7NWF6	Q7NWF6_CHRVO	-ASGLMQLMP
tr	C0Z4A8	C0Z4A8_BREBN	-ARGLLQIMP
tr	A7BWV5	A7BWV5_9GAMM	YGRGLMQIDY
tr	Q7VF48	Q7VF48_HELHP	-AYGLMQVVP
tr	C9PJB4	C9PJB4_VIBFU	-AFGLMQIVP
tr	A6D3Q2	A6D3Q2_9VIBR	-AVGIMQVLP
tr	Q1INF2	Q1INF2_ACIBL	HGVGLVQIDI