

Supporting Information File S1.

Table of organisms and sequences identified in the study, including information on the genes used and the genome versions studied.

Supporting Information File S1

Ensembl Frem1 orthologs

<u>Organism</u>	<u>Ensembl Gene</u>	<u>Genome version</u>	<u>Sequence identified</u>
Vicugna pacos	ENSVPAG00000005812	vicPac1	MVTREPMLKAALPLFAR
Anolis carolinensis	ENSACAG00000017780	AnoCar1.0	MVKQEHMLKTALPLFAR
Dasyus novemcinctus	ENSDNOG00000007689	dasNov2	corrupt DNA sequence
Otolemur garnettii	ENSOGAG00000011871	otoGar1	MVTQESMLKAALPLFAR
Ciona savignyi	ENSCSAVG00000001283	CSAV 2.0	None identified
Caenorhabditis elegans	C48E7.6	WS200	None identified
Felis catus	ENSFCAG00000004349	CAT	MVTQDPMLKAALPLFAR
Gallus gallus	ENSGALG00000005426	WASHUC2	MVNQEHMLKTTLPLFAR
Pan troglodytes	ENSPTRG00000020782	CHIMP2.1	MVTQESMLKAALPLFTR
Ciona intestinalis	ENSCING00000013358	JGI 2	None identified
	ENSCING00000007527	JGI 2	None identified
	ENSCING00000004972	JGI 2	None identified
Bos taurus	ENSBTAT00000026827	Btau_4.0	MVTQESMLKAALPLFAR
Canis familiaris	ENSCAFG00000001537	CanFam 2.0	LPLFAR
Tursiops truncatus	ENSTTRG00000008037	turTru1	MVTQESMLKATLPLFAR
Loxodonta africana	ENSLAFG00000008954	Loxafr3.0	MVKQESMLKAALPLFVR
Takifugu rubripes	ENSTRUG00000006301	FUGU 4.0	MHLSAFGYLFR**
Gorilla gorilla	ENSGGOG00000014708	gorGor3	MVTQESMLKAALPLFTR
Cavia porcellus	ENSCPOG00000011267	cavPor3	MVTQESMLKAALPLFAR
Erinaceus europaeus	ENSEEUG00000001483	eriEur1	MVTQESMLKAALPLFAR
Homo sapiens	ENSG00000164946	GRCh37	MVTQESMLKAALPLFTR
Equus caballus	ENSECAG00000015567	Equ Cab2	MVTQESMLKAALPLFAR
Procavia capensis	ENSPCAG00000015286	proCap1	MVKQESMLKAALPLFAR
Dipodomys ordii	ENSDORG00000014455	dipOrd1	LVTQESMLKAALPLFAR
Echinops telfairi	ENSETEG00000015868	TENREC	SMLKAALPLFVR
Macaca mulatta	ENSMMUG00000008128	MMUL1.0	MVTQESMLKAALPLFAR
Callithrix jacchus	ENSCJAG00000012240	Callithrix_Jacchus-3.2	MVTQESMLKAALPLFAR

Oryzias latipes	ENSORLG00000020663	HdrR	None identified
Pteropus vampyrus	ENSPVAG00000014241	pteVam1	MVTQESMLKAALPLFAR
Myotis lucifugus	ENSMLUG00000016591	myoLuc1	MVTQESMLKAALPLFAR
Mus musculus	ENSMUSG00000059049	NCBIM37	MGTQEPMMLKAALPLFAR
Microcebus murinus	ENSMICG00000015934	micMur1	MVTQESMLKAALPLFAR
Monodelphis domestica	ENSMODG00000014986	monDom5	MVKQASMLKATLPLFAR
Pongo pygmaeus	ENSPPYG00000019211	ppYG2	MVTQESMLKAALPLFTR
Sus scrofa	ENSSSCG00000005187	Sscrofa9	No homologous exon identified
Ochotona princeps	ENSOPRG00000017066	OchPri2.0	MVTQESMLKAALPLFAR
Ornithorhynchus anatinus	ENSOANG00000022534	Ornithorhynchus_a natinus-5.0	No homologous exon identified
	ENSOANG00000013004	Ornithorhynchus_a natinus-5.0	No homologous exon identified
	ENSOANG00000010120	Ornithorhynchus_a natinus-5.0	No homologous exon identified
Oryctolagus cuniculus	ENSOCUG00000010379	oryCun2	MVTQESMLKAALPLFAR
Rattus norvegicus	ENSRNOG00000022309	RGSC 3.4	MGTQEPMMLKTALPLFAR
Sorex araneus	ENSSARG00000010446	sorAra1	MVTHEMLKAALPLFAR
Choloepus hoffmanni	ENSCHOG00000008350	choHoff1	MVKQESMLKAALPLFAR
Spermophilus tridecemlineatus	ENSSTOG00000003243	speTri1	MVTQESMLKAALPLFAR
Gasterosteus aculeatus	ENSGACG00000000932	BROAD S1	None identified
Tarsius syrichta	ENSTSYG00000004164	TarSyr1	ARESMMLKAPLPLFAR
Tetraodon nigroviridis	ENSTNIG00000005289	TETRAODON 8.0	None identified
Tupaia belangeri	ENSTBEG00000013718	tupBel1	MVTPEPMLKAALPLFAR
Macropus eugenii	ENSMEUG00000012357	Meug_1.0	MVKQASMLKATLPLFAR
Xenopus tropicalis	ENSXETG00000003300	JGI4.1	MGKQEPMMLKAPLPLFAR
	ENSXETG00000008875	JGI4.1	None identified
Taeniopygia guttata	ENSTGUG00000004583	Taeniopygia_guttat a-3.2.4	MVNREQMLKTALPLFAR
Danio rerio	ENSDARG000000069473	Zv7	None identified

Ensembl Frem1b orthologs

<u>Organism</u>	<u>Ensembl Gene</u>	<u>Genome version</u>	<u>Sequence identified</u>
Anolis carolinensis	ENSACAG00000007607	AnoCar1.0	None identified
Ciona savignyi	ENSCSAVG00000001283	CSAV 2.0	None identified
Caenorhabditis elegans	C48E7.6	WS200	None identified
Ciona intestinalis	ENSCING00000013358	JGI 2	None identified
	ENSCING00000007527	JGI 2	None identified
	ENSCING00000004972	JGI 2	None identified
Takifugu rubripes	ENSTRUG00000000642	FUGU 4.0	None identified
Oryzias latipes	ENSORLG00000003500	HdrR	None identified
Gasterosteus aculeatus	ENSGACG00000003138	BROAD S1	None identified
Tetraodon nigroviridis	ENSTNIG00000002896	TETRAODON 8.0	None identified
Xenopus tropicalis	ENSXETG00000008875	JGI4.1	None identified
Danio rerio	ENSDARG000000062402	Zv8	None identified