

Table S1: N-terminal FGE amino acid sequences used for WebLogo generation.

The 88 species used are listed and classified. The N-terminal FGE sequences were centered at P1 (Arg72 of human FGE) or based on a ClustalW alignment for group III that do not bear a R/K/X-Y-S/R/K/X motif. Sequences are given for the part that corresponds to the cleavage site P8-P8' and the core region of P4-P1 is marked in bold letters.

Abbr.	Species	Classification	Sequence P8-P8'	number of sequences
homSap	<i>homo sapiens</i>	euarchontoglires	AAAHRYSREANAPGPV	36
panTro	<i>pan troglodytes</i>		AAAHRYSREANAPGPV	
gorGor	<i>gorilla gorilla</i>		AAAHRYSREANAPGPV	
ponAbe	<i>pongo abelii</i>		AAAHRYSREANAPGPV	
nomLeu	<i>nomascus leucogenys</i>		AAAHRYSREANAPGPV	
rheMac	<i>macaca mulatta</i>		GAAHRYSR EANAPGSV	
macFas	<i>macaca fascicularis</i>		GAAHRYSR EANAPGSV	
papHam	<i>papiro hamadryas</i>		GAAHRYSR EANAPGSV	
calJac	<i>callithrix jacchus</i>		AAAHRYSREANAPGPV	
tarSyr	<i>tarsius syrichta</i>		AAAHRYSREANAPGPF	
otoGar	<i>otolemur garnettii</i>		AAAHRYSREANAPGPI	
tupBel	<i>tupaias belangeri</i>		AAAHRYSREANVPGPV	
musMus	<i>mus musculus</i>		AAAQYSREANAPGLT	
ratNor	<i>rattus norvegicus</i>		AAAQYSREANAQGLT	
speTri	<i>spermophilus tridecemlineatus</i>		SAAHRYSR EANAPSAL	
dipOrd	<i>diplomys ordii</i>		AAAHRYSREANAPPGP	
oryCun	<i>oryctolagus cuniculus</i>		AAAHPYSREANAPGPV	
ochPri	<i>ochotona princeps</i>		AAAHLYSREANAPGPV	
canFam	<i>canis familiaris</i>		AAAHRYSREANAPGQV	
felCat	<i>felis catus</i>		AAAHRYSREANAPGQV	
ursAme	<i>ursus americanus</i>		AAAHRYSREANAPGQV	
ailMel	<i>ailuropoda melanoleuca</i>		AAAHRYSREGNAPQV	
pteVam	<i>pteropus vampyrus</i>		AAAHRYSREANAAAGP	
turTru	<i>tursiops truncatus</i>	laurasiatheres	AAAHRYSREANAPGSV	22
susScr	<i>sus scrofa</i>		AAAQYSREANAPGPV	
equCab	<i>equus caballus</i>		AAAHRYSREANAPGSG	
bosTau	<i>bos taurus</i>		AAAHRYSREANAPGSV	
capHir	<i>capra hircus</i>		AAAHRYSREANAPGSV	
oviAri	<i>ovis aries</i>		AAPHYSREANAPGSV	
eriEur	<i>erinaceus europae</i>		AAAHRYSWEANAPGPD	
loxAfr	<i>loxodonta africana</i>		AAAHRYSREANVPGPV	
mamPri	<i>mammuthus primigenius</i>		AAAHRYSREANVPGPV	
proCap	<i>procavia capensis</i>		AAAHRYSREANVPGPV	
echTel	<i>echinops telfairi</i>	atlantogenata	AAAHRYSREANAPGLG	30
dasNov	<i>dasyurus novemcinctus</i>		AAAHGYSREANAQGRA	
choHof	<i>choleopus hoffmanni</i>		AAAHRYSREANAPGRA	
monDom	<i>monodelphis domestica</i>	marsupials	SAAHRYSR EANVAEPA	
macEug	<i>macropus eugenii</i>		SAAHKYSREANVAERA	
anoCar	<i>anolis carolinensis</i>		VASRKYSREVHLPQQP	
galGal	<i>gallus gallus</i>		VATVRYSAANDGRSP	
melGal	<i>meleagris gallopavo</i>		AAARRYSAVANGRSS	
allMis	<i>alligator mississippiensis</i>		AAVRYSPEANAQRPG	
pytMol	<i>python molurus</i>		VAARKYSLDANVSQQP	
ambMex	<i>ambystoma mexicanum</i>		HRAARYSREANEPLKA	
xenTro	<i>xenopus tropicalis</i>		DSPHKYSREANEPEPPA	
xenLae	<i>xenopus laevis</i>		ENSHKYSREANEPEPT	
takRub	<i>takifugu rubripes</i>	early diverging amniotes	VDGAKYSRGASRRDQT	
tetNig	<i>tetraodon nigroviridis</i>		EPGPKYSRGANGRDDED	
danReq	<i>danio rerio</i>		DVNRIYSKTANEGPDD	
oncMyk	<i>oncorhynchus mykiss</i>		KESSKYSKSNERHTD	
salSal	<i>salmo salar salmon</i>		KESSKYSKSNERHTD	
oryLat	<i>oryzias latipes</i>		MTEPKYSSAGSKSNGG	
ictPun	<i>ictalurus punctatus</i>		DEDGKYSERANKEFVG	
ictFur	<i>ictalurus furcatus</i>		DEDGKYSERANKEFVG	
gasAcu	<i>gasterosteus aculeatus</i>		EEGSKYSEGANGRFVO	
oreNil	<i>oreochromis niloticus</i>		LDEDKYSRNDANDRTNO	
osmMor	<i>osmerus mordax</i>	ray-finned fish	SHASKYLOTTNEKEPTL	
esoLuc	<i>esox lucius</i>		RESGIYSKTSNEKLTD	
cioInt	<i>ciona intestinalis*</i>	urochordates	EVAAEPDPLPLOKVSSD	
cioSav	<i>ciona savignyi*</i>		EVEEEPDIPPLPTIPTG	
halRor	<i>halocynthia roretzi*</i>		MDQYEVTENAEQHLVE	
oikDio	<i>oikopleura dioica</i>		ACTFTMGDNELMLPGD	
braFlo	<i>branchiostoma floridae*</i>		PVEGEGGAEAPEFDKD	
strPur	<i>strongylocentrotus purpuratus*</i>		ALEEKYSREANDPIDH	
parLiv	<i>paracentrotus lividus</i>		PLALKYSKEVNDAUTGS	
sacKow	<i>saccoglossus kowalevskii*</i>		KSGGEVNDHHGVEQHD	
droMel	<i>drosophila melanogaster</i>		SQVCQORAQGAHSHY	
anoGam	<i>anopheles gambiae</i>		KERVIFPTDAAQHSPS	
mayDes	<i>mayetiola destructor</i>	echinoderms	SNEKKDDSSNEMCSNP	
bomMor	<i>bombyx mori</i>		LYSGNNNEQCSVENIS	
apiMell	<i>apis mellifera</i>		YKKEIQDSCILANDILH	
camFlo	<i>camponotus floridanus</i>		GCVIDNSKFDADIN	
acyPis	<i>acyrthosiphon pisum</i>		VCTSSATNSNERLDSE	
rhoPro	<i>rhodnius prolixus</i>		CIPSSFLDLIKQTREN	
pedHum	<i>pediculus humanus</i>		KVNFKDDAIFFEEQFIS	
triCas	<i>tribolium castaneum</i>		EPHNKYSKTFNEGGS	
denPon	<i>dendroctonus ponderosae</i>		NPSQKYKRDLNENPAN	
lepDec	<i>leptinotarsa decemlineata</i>		NPSHKYMKESNEETGN	
eriSin	<i>eriocheir sinensis</i>	ecdysozoa	SPETSPVLENNEESPN	
ambVar	<i>amblyomma variegatum</i>		GSTSDDDESERVEVED	
rhiMic	<i>rhipicephalus microplus</i>		NHDEKARLDSENAALN	
aplCal	<i>aplysia californica</i>		SQAPESSDPSGSVGVD	
lotGig	<i>lotus gigantea</i>		KGSQADDKSGMYHQ	
nemVec	<i>nematostella vectensis</i>	cnidarians	KKFVKYSKKANVDOODI	
acrMil	<i>acropora millepora</i>		KITDRKNGEGKFNLSK	
monFav	<i>montastraea favolata</i>		MTLNNTGNTDGEIKLKS	
plePil	<i>pleurobranchia pileus</i>		KISDMKRNEQOSEHPN	
ampQue	<i>amphimedon queenslandica</i>	basal metazoan	SVEKEESEEPKAQAE	

* intronated differently