

Table S1 – Sequences analyzed in this study

Species	Common Name	Phylum / Class	Fibrillin Isoform	Accession Number	Database	Modified ^{a)}
<i>Homo sapiens</i>	Human	Chordata / Mammalia	FBN-1	NM_000138.4	3	No
			FBN-2	NM_001999.3	3	No
			FBN-3	NM_032447.3	3	No
<i>Pan troglodytes</i>	Common chimpanzee	Chordata / Mammalia	FBN-1	XM_001149266.1	3	No
			FBN-2	XM_526999.2	3	No
			FBN-3	ENSPTRT00000019141	2	No
<i>Macaca mulatta</i>	Rhesus macaque	Chordata / Mammalia	FBN-1	XM_001113107.1	3	No
			FBN-2	XR_012189.1	3	Yes
			FBN-3	XM_001097964.2	3	Yes
<i>Otolemur garnettii</i>	Bush baby	Chordata / Mammalia	FBN-1	ENSOGAT00000009590	2	No
			FBN-2	ENSOGAG00000008602	2	No
			FBN-3	ENSOGAG00000012883	2	No
<i>Sus scrofa</i>	Wild pig	Chordata / Mammalia	FBN-1	NM_001001771.1	3	No
			FBN-2	ENSSSCT00000015577	2	Yes
			FBN-3	ENSSSCT00000014847	2	Yes
<i>Bos Taurus</i>	Cow	Chordata / Mammalia	FBN-1	NM_174053.1	3	No
			FBN-2	XM_002688974.1	3	No
			FBN-3	XM_001254849.2	3	Yes
<i>Equus caballus</i>	Horse	Chordata / Mammalia	FBN-1	XM_001502259.2	3	No
			FBN-2	XM_001918259.1	3	No
			FBN-3	XM_001916998.1	3	Yes
<i>Canis lupus familiaris</i>	Dog	Chordata / Mammalia	FBN-1	XM_535468.2	3	No
			FBN-2	XM_538612.2	2	No
			FBN-3	XM_542124.2	3	No
<i>Ailuropoda melanoleuca</i>	Giant panda	Chordata / Mammalia	FBN-1	EFB29915.1	3	No
			FBN-2	GL192553.1	3	No
			FBN-3	EFB25575.1	3	No
<i>Dasypus novemcinctus</i>	Nine-banded armadillo	Chordata / Mammalia	FBN-1	ENSDNOT00000007233	2	No
			FBN-2	ENSDNOT00000015787	2	No

<i>Cavia porcellus</i>	Guinea pig	Chordata / Mammalia	FBN-1	Q924N1_CAVPO	2	Yes
			FBN-2	ENSCPOT00000000731	2	Yes
			FBN-3	ENSCPOT000000027611	2	Yes
<i>Rattus norvegicus</i>	Brown rat	Chordata / Mammalia	FBN-1	AF135059.1	3	No
			FBN-2	AF135060.1	3	No
<i>Mus musculus</i>	House mouse	Chordata / Mammalia	FBN-1	NM_007993.2	3	No
			FBN-2	NM_010181.2	3	No
<i>Monodelphis domestica</i>	Gray short-tailed opossum	Chordata / Mammalia	FBN-1	XM_001369811.1	3	No
			FBN-2	ENSMODT00000001530	2	No
			FBN-3 ^{b)}	XM_001376665.1	3	Yes
<i>Ornithorhynchus anatinus</i>	Platypus	Chordata / Mammalia	FBN-1	Ultra 375 scaffold, contigs 215463.1, 187161.1, 73890.2	3, 6	Yes
			FBN-3 ^{b)}	ENSOANT00000010193	2	Yes
<i>Taeniopygia guttata</i>	Zebra finch	Chordata / Aves	FBN-1	XM_002196584.	3	Yes
			FBN-2	XM_002189166.1	3	No
			FBN-3 ^{b)}	ENSTGUT00000001010	2	No
<i>Gallus gallus</i>	Chicken	Chordata / Aves	FBN-1	XM_413815.2	3	Yes
			FBN-2	XM_424715.2	3	Yes
			FBN-3 ^{b)}	XM_418173.2	3	No
<i>Anolis carolinensis</i>	Green anole lizard	Chordata / Reptilia	FBN-1	ENSACAT00000005310	2	Yes
			FBN-2	ENSACAT00000002353	2	Yes
			FBN-3 ^{b)}	ENSACAT00000014803	2	Yes
<i>Xenopus tropicalis</i>	Western clawed frog	Chordata / Amphibia	FBN-1	genomic scaffold 221	1, 6	Yes
			FBN-2	462390	1	Yes
			FBN-3 ^{b)}	ESTs	5, 6	Yes
<i>Takifugu rubripes</i>	Japanese pufferfish	Chordata / Actinopterygii	FBN-1	ENSTRUT000000043497	2	Yes
			FBN-2/3 ^{b)}	ENSTRUT000000033093	2	Yes
<i>Tetraodon nigroviridis</i>	Spotted green pufferfish	Chordata / Actinopterygii	FBN-1	ENSTNIT00000002027	2	Yes
			FBN-2/3 ^{b)}	ENSTNIT00000001247	2	Yes
<i>Oryzias latipes</i>	Japanese medaka fish	Chordata / Actinopterygii	FBN-1	ENSORLG00000002614	2	Yes
			FBN-2/3 ^{b)}	ENSORLT00000006744	2	Yes

<i>Danio rerio</i>	Zebrafish	Chordata / Actinopterygii	FBN-1	ENSDARP00000058536	2	Yes
			FBN-2/3 ^{b)}	NM_001135790.1	3	No
			FBN-4	XM_681408.4, XM_686017.4, EU854565.1	3	No
<i>Branchiostoma floridae</i>	Amphioxus	Chordata / Leptocardii	FBN	127734	1	No
<i>Petromyzon marinus</i>	Sea lamprey	Chordata / Cephalaspidomorphi	FBN	contig 1915	5, 6	Yes
<i>Ciona intestinalis</i>	Sea squirt	Chordata / Ascidiacea	FBN	XM_002119952.1	3	Yes
<i>Ixodes scapularis</i>	Blacklegged tick	Arthropoda / Arachnida	FBN	XM_002412312.1	3	No
<i>Apis mellifera</i>	European honey bee	Arthropoda / Insecta	FBN	Group 11 scaffold	4, 6	Yes
<i>Harpegnathos saltator</i>	Jerdon's jumping ant	Arthropoda / Insecta	FBN	EFN77739	3	No
<i>Tribolium castaneum</i>	Red Flour Beetle	Arthropoda / Insecta	FBN	XM_969251.2	3	Yes
<i>Pediculus humanus corporis</i>	Human body louse	Arthropoda / Insecta	FBN	XM_002428733.1	3	No
<i>Acyrtosiphon pisum</i>	Pea aphid	Arthropoda / Insecta	FBN	XM_001945936.1	3	Yes
<i>Daphnia pulex</i>	Water flea	Arthropoda / Branchiopoda	FBN	315775	1	No
<i>Lottia gigantea</i>	Sea snail	Mollusca / Gastropoda	FBN	232356	1	Yes
<i>Capitella teleta</i>	Worm	Annelida / Polychaeta	FBN	223950	1	Yes
<i>Strongylocentrotus purpuratus</i>	California purple sea urchin	Echinodermata / Echinoidea	FBN ^{b)}	XM_782436.2	3	Yes
<i>Hydra magnipapillata</i>	Hydra	Cnidaria / Hydrozoa	FBN	XR_053678.1	3	Yes
<i>Podocoryne carnea</i>	Jellyfish	Cnidaria / Hydrozoa	FBN	L39930.1	3	Yes
<i>Nematostella vectensis</i>	Starlet sea anemone	Cnidaria / Anthozoa	FBN	genomic scaffold 113	3, 6	Yes

¹ DOE Joint Genome Institute (<http://www.jgi.doe.gov>)

² Ensembl (<http://uswest.ensembl.org>)

³ NCBI Nucleotide Database (Nucleotide) (<http://www.ncbi.nlm.nih.gov/nucleotide>)

⁴ UCSC Genome Bioinformatics (<http://genome.ucsc.edu>)

⁵ EMBL European Bioinformatics Institute (<http://www.ebi.ac.uk>)

⁶ These sequences were obtained by manual sequence reconstruction from various genomic scaffolds and contigs

^{a)} Indicated sequences have been modified to remove missense regions and add missing regions

^{b)} These sequence names are in conflict between our analysis and annotated fibrillin database entries; see supplemental text for further information