S2 Table: Sequence sources

source	citation	species
Uniprot Genome	(Consortium 2015)	*Bos taurus* *Gallus gallus* *Homo sapiens* *Loxodonta africana* *Monodelphis domestica* *Mus musculus* *Ornithorhynchus anatinus* *Sarcophilus harrisii*
Ensembl v.84 predicted peptides Genome	(Kersey et al. 2016)	*Danio rerio* *Gadus morhua* *Gasterosteus aculeatus* *Latimeria chalumnae* *Lepisosteus oculatus* *Macropus eugenii* *Oreochromis niloticus* *Takifugu rubripes*
reptilian-transcriptomes.org Transcriptome	(Tzika et al. 2015)	*Alligator mississippiensis* *Chalcides ocellatus* *Chamaeleo chamaeleon* *Chrysemys picta* *Crocodylus porosus* *Eublepharis macularius* *Gavialis gangeticus* *Pantherophis guttatus* *Python molurus bivittatus* *Sphenodon punctatus* *Thamnophis elegans*
Avianbase Genome	(Eöry et al. 2015)	*Aptenodytes forsteri* *Columba livia*
Skatebase Genome	(Wang et al. 2012)	*Callorhinchus milii* *Leucoraja erinacea* *Scyliorhinus canicula*
SRA transcriptomes (Leinonen et al. 2011)	SRR1693777	*Acipenser transmontanus*
	SRR1604859	*Botryllus schlosseri*
	SRR652971	*Ginglymostoma cirratum*
	SRR1693776	*Ichthyophis bannanicus*
	SRR1693787	*Lepidosiren paradoxa*
	SRR1695991	*Lethenteron camtschaticum*
	SRR388685	*Petromyzon marinus*

	SRR1612395	*Polypterus senegalus*
	SRR2039259	*Potamotrygon amandae*
	SRR2028021	*Protopterus annectens*
	SRR1514129	*Scyliorhinus canicula*
	SRR931704	*Tachyglossus aculeatus*
Published transcriptomes	(Richards et al. 2013)	*Carcharodon carcharias*
	(Matsunami et al. 2015b, 2015a)	*Hynobius retardatus*
	(Robertson and Cornman 2014, 2013)	*Lithobates clamitans*
	(Qiao et al. 2013)	*Odorrana margaretae*
	(Wang et al. 2015)	*Oikopleura dioica*
	(Genomic Resources Development Consortium et al. 2015; Nourisson et al. 2014)	*Rhinella marina*
	(Genomic Resources Development Consortium et al. 2015; Nourisson et al. 2014)	*Rhinella schneideri*
	(Deck et al. 2013)	*Squalus acanthias*
	(B. Wielstra et al. 2014; Ben Wielstra et al. 2014)	*Triturus cristatus*

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