

**Additional file 1: Table S1: List of the 55 used species in the analysis**

	<b>English name</b>	<b>Latin name</b>	<b>References</b>
FISH (n=3)	Elephant shark	<i>Callorhynchus milii</i>	[1]
	Coelacanth	<i>Latimeria chalumnae</i>	[2]
	Spotted gar	<i>Lepisosteus oculatus</i>	[3]
AMPHIBIA (n=2)	Tibetan frog	<i>Nanorana parkeri</i>	[4]
	Tropical clawed frog	<i>Xenopus tropicalis</i>	[5]
NON-AVIAN REPTILES (n=13)	<a href="#">American alligator</a>	<i>Alligator mississippiensis</i>	[6]
	<a href="#">Chinese alligator</a>	<i>Alligator sinensis</i>	[7]
	Green anole	<i>Anolis carolinensis</i>	[8]
	Green sea turtle	<i>Chelonia mydas</i>	[9]
	<a href="#">Painted turtle</a>	<i>Chrysemys picta</i>	[10]
	Australian saltwater crocodile	<i>Crocodylus porosus</i>	[6]
	Gharial	<i>Gavialis gangeticus</i>	[6]
	Schlegel's Japanese Gecko	<i>Gekko japonicus</i>	[11]
	Chinese soft-shelled turtle	<i>Pelodiscus sinensis</i>	[9]
	<a href="#">Central bearded dragon</a>	<i>Pogona vitticeps</i>	[12]
	Brown-spotted pit viper	<i>Protobothrops mucrosquamatus</i>	[13]
	<a href="#">Burmese python</a>	<i>Python bivittatus</i>	[14]
	Common garter snake	<i>Thamnophis sirtalis</i>	
AVIAN REPTILES (BIRDS) (n=16)	Mallard	<i>Anas platyrhynchos</i>	[15]
	Domestic goose	<i>Anser cygnoides domesticus</i>	[16]
	Emperor penguin	<i>Aptenodytes forsteri</i>	[17]
	Brown kiwi	<i>Apteryx australis mantelli</i>	[18]
	<a href="#">American golden eagle</a>	<i>Aquila chrysaetos canadensis</i>	[19]
	Anna's hummingbird	<i>Calypte anna</i>	[17]
	Rock pigeon	<i>Columba livia</i>	[17]
	American crow	<i>Corvus brachyrhynchos</i>	[17]
	Japanese quail	<i>Coturnix japonica</i>	[20]
	Chicken	<i>Gallus gallus</i>	[17,21,22]
	Bengalese finch	<i>Lonchura striata domestica</i>	[23]
	Great Tit	<i>Parus major</i>	[24]
	Tibetan ground-tit	<i>Pseudopodoces humilis</i>	[25]
	Ostrich	<i>Struthio camelus australis</i>	[17]
	Common starling	<i>Sturnus vulgaris</i>	[26]
	White-throated tinamou	<i>Tinamus guttatus</i>	[17]
MAMMALS (n=21)	Giant panda	<i>Ailuropoda melanoleuca</i>	[27]
	Western gorilla	<i>Gorilla gorilla</i>	[28,29]
	Great roundleaf bat	<i>Hipposideros armiger</i>	[30]
	<a href="#">Human</a>	<i>Homo sapiens</i>	[31,32]
	<a href="#">African savanna elephant</a>	<i>Loxodonta africana</i>	[33]
	Natal long-fingered bat	<i>Miniopterus natalensis</i>	[34]
	Gray short-tailed opossum	<i>Monodelphis domestica</i>	[35]
	House mouse	<i>Mus musculus</i>	[36]
	Brandt's bat	<i>Myotis brandtii</i>	[37]
	David's Myotis	<i>Myotis davidii</i>	[38]
	Little brown bat	<i>Myotis lucifugus</i>	[33]
	<a href="#">White-tailed deer</a>	<i>Odocoileus virginianus texanus</i>	[39]
	<a href="#">Leopard</a>	<i>Panthera pardus</i>	

	Amur tiger	<i>Panthera tigris altaica</i>	[40]
	Koala	<i>Phascolarctos cinereus</i>	[41]
	Sperm whale	<i>Physeter catodon</i>	
	Large flying fox	<i>Pteropus vampyrus</i>	
	Chinese rufous horseshoe bat	<i>Rhinolophus sinicus</i>	[30]
	Tasmanian devil	<i>Sarcophilus harrisii</i>	[42]
	Pig	<i>Sus scrofa</i>	[43]
	Polar bear	<i>Ursus maritimus</i>	[44]

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