

Additional file 3. Accession numbers and names of species included in Fig 1. The names of undefended species of poison frogs (Dendrobatidae) are in black and those of defended species are in blue.

Subunit	Common name	Species	Accession number
$\beta 2$	tunicate	<i>Ciona intestinalis</i>	NP_001265876.1
	sea lamprey	<i>Petromyzon marinus</i>	XP_032806233.1
	great white shark	<i>Charcharodon carcharias</i>	XP_041035646.1
	zebrafish	<i>Danio rerio</i>	XP_005169811.1
	human	<i>Homo sapiens</i>	CAD88996.1
	chicken	<i>Gallus gallus</i>	NP_990144.1
	Western clawed frog	<i>Xenopus tropicalis</i>	NP_001093684.1
	High Himalaya frog	<i>Nanorana parkeri</i>	XP_018425584.1
	grass frog	<i>Rana temporaria</i>	XP_040188232.1
	brilliant-thighed poison frog	<i>Allobates femoralis</i>	ATG31806.1
		<i>Hyloxalus italoii</i>	ATG31785.1
	strawberry poison frog	<i>Oophaga pumilio</i>	ATG71844.1
	Rio Santiago poison frog	<i>Excidobates captivus</i>	ATG31798.1
	golden poison frog	<i>Phyllobates terribilis</i>	ATG31810.1
	Ecuador poison frog	<i>Ameerega bilinguis</i>	ATG31790.1
		<i>Silversotneia cf. gutturalis</i>	ATG31801.1
		<i>Leucostethus fugax</i>	ATG31797.1
	Anthony's poison frog	<i>Epipedobates anthonyi</i>	ATG31796.1
$\alpha 4$	human	<i>Homo sapiens</i>	AAB40111.1
	Western clawed frog	<i>Xenopus tropicalis</i>	NP_001107315.1
	High Himalaya frog	<i>Nanorana parkeri</i>	XP_018415603.1
	Anthony's poison frog	<i>Epipedobates anthonyi</i>	ATG31830.1