

Supplementary Table S1. Species information used in phylogenetic analysis.

Species Name	Gene	GenBank Accession Number
<i>N. nuchalis</i> in the study	ApoAI	MZ851746
<i>Etheostoma cragini</i> (Gilbert, 1885)	ApoA-Ib	XP_034724041
<i>Perca fluviatilis</i> (Linnaeus, 1758)	ApoAI-like	XP_039643066
<i>Morone saxatilis</i> (Walbaum, 1792)	ApoAI-like	XP_035536036
<i>Echeneis naucrates</i> (Linnaeus, 1758)	ApoAI-like	XP_029373375
<i>Seriola lalandi dorsalis</i> (Valenciennes, 1833)	ApoA-IV	XP_023256300
<i>Micropterus salmoides</i> (Lacepède, 1802)	ApoAI-like	XP_038585910
<i>Rachycentron canadum</i> (Linnaeus, 1766)	ApoAI	ACV50420
<i>Sander lucioperca</i> (Linnaeus, 1758)	ApoA-Ib	XP_031139526
<i>Toxotes jaculatrix</i> (Pallas, 1767)	ApoA-Ib	XP_040903009
<i>Seriola dumerili</i> (Risso, 1810)	ApoA-IV	XP_022616173
<i>Anoplopoma fimbria</i> (Pallas, 1814)	ApoAI precursor	ACQ58664
<i>Perca flavescens</i> (Mitchill, 1814)	ApoAI-like	XP_028427328
<i>Scophthalmus maximus</i> (Linnaeus, 1758)	ApoAI-like	XP_035478339
<i>Lates calcarifer</i> (Bloch, 1790)	ApoAI-like	XP_018543131
<i>Astatotilapia calliptera</i> (Günther, 1894)	ApoA-IV	XP_026047886
<i>Liparis tanakae</i> (Gilbert & Burke, 1912)	ApoAI	TNN34591
<i>Epinephelus coioides</i> (Hamilton, 1822)	ApoAI	ACM48181
<i>Epinephelus akaara</i> (Temminck & Schlegel, 1842)	ApoAI	AGT02114
<i>Pungitius pungitius</i> (Linnaeus, 1758)	ApoA-Ib	XP_037317114
<i>Larimichthys crocea</i> (Richardson, 1846)	ApoAI	XP_010743548
<i>Parambassis ranga</i> (Hamilton, 1822)	ApoAI-like	XP_028275332
<i>Channa argus</i> (Cantor, 1842)	ApoAI	KAF3693043
<i>Notothenia coriiceps</i> (Richardson, 1844)	ApoAI	XP_010792180
<i>Chelmon rostratus</i> (Linnaeus, 1758)	ApoA-Ib	XP_041796720
<i>Cyclopterus lumpus</i> (Linnaeus, 1758)	ApoA-Ib	XP_034404235
<i>Epinephelus lanceolatus</i> (Bloch, 1790)	ApoA-Ib	XP_033487725
<i>Gymnodraco acuticeps</i> (Boulenger, 1902)	ApoAI-like	XP_034058693
<i>Oryzias melastigma</i> (McClelland, 1839)	ApoAI	AEA51138
<i>Gasterosteus aculeatus</i> (Linnaeus, 1758)	ApoAI-like	XP_040046834
<i>Anabas testudineus</i> (Bloch, 1792)	ApoAI	XP_026230177
<i>Hippoglossus hippoglossus</i> (Linnaeus, 1758)	ApoA-Ib	XP_034459733
<i>Fundulus heteroclitus</i> (Linnaeus, 1766)	ApoAI	XP_012728061
<i>Collichthys lucidus</i> (Richardson, 1844)	ApoAI	TKS81356
<i>Austrofundulus limnaeus</i> (Schultz, 1949)	ApoA-IV	XP_013881474
<i>Xiphias gladius</i> (Linnaeus, 1758)	ApoA-Ib	XP_039987748
<i>Homo sapiens</i>	ApoAI	X02162
<i>Mus musculus</i>	ApoAI	NM_009692
<i>Rattus norvegicus</i>	ApoAI	NP_036870
<i>Macaca fascicularis</i>	ApoAI	NP_001270674
<i>Saimiri boliviensis</i>	ApoAI	XP_010332821