

**Supplementary Table S1.** Coding sequences of mt-COI from 21 Lampriformes species currently available on NCBI database used in our phylogenetic reconstruction of Lampriformes relationships.

GenBank Accession ID	Scientific name	COI length (bp)
MN123259.1	<i>Agrostichthys parkeri</i>	648
GU440303.1	<i>Desmodema lorum</i>	652
MN117725.1	<i>Desmodema polystictum</i>	658
BBC74528.1	<i>Eumecichthys fiski</i>	516
JF931925.1	<i>Lampris australensis</i>	655
GU992944.1	<i>Lampris guttatus</i>	662
MN123398.1	<i>Lampris immaculatus</i>	645
JF931946.1	<i>Lampris incognitus</i>	655
LC521832.1	<i>Lampris megalopsis</i>	685
MN123409.1	<i>Lophotus cappellei</i>	645
KR086866.1	<i>Lophotus lacepede</i>	665
EU366588.1	<i>Metavelifer multiradiatus</i>	782
MN123480.1	<i>Regalecus glesne</i>	645
KU943114.1	<i>Regalecus russelii</i>	552
GU440558.1	<i>Trachipterus altivelis</i>	652
MT323519.1	<i>Trachipterus arcticus</i>	629
HQ564197.1	<i>Trachipterus jacksonensis</i>	652
OM527150.1	<i>Trachipterus trachypterus</i>	652
GU673640.1	<i>Velifer hypselopterus</i>	652
MT323474.1	<i>Zu cristatus</i>	632
MN123529.1	<i>Zu elongatus</i>	651