

Title page

Sequencing and characterization of the complete mitochondrial genome of Japanese Swellshark (*Cephalloscyllium umbratile*)

Ke-Cheng Zhu ^{1,2,3}, Yin-Yin Liang ¹, Na Wu ¹, Hua-Yang Guo ^{1,2}, Nan Zhang ^{1,2}, Shi-Gui Jiang ^{1,2,4} & Dian-Chang Zhang ^{1,2,3*}

¹Key Laboratory of South China Sea Fishery Resources Exploitation and Utilization, Ministry of Agriculture, South China Sea Fisheries Research Institute, Chinese Academy of Fishery Sciences, 231 Xingang Road West, Haizhu District, Guangzhou 510300, China;

²Engineer Technology Research Center of Marine Biological Seed of Guangdong Province, Guangzhou, Guangdong Province, The People's Republic of China;

³Key Laboratory of Fishery Ecology & Environment, Guangdong Province;

⁴South China Sea Bio-Resource Exploitation and Utilization Collaborative Innovation Center.

*Corresponding author:

Dr. Dian C. Zhang

231 Xingang Road West, Haizhu District, Guangzhou City, Guangdong 510300, PR China.

E-mail address: zhangdch@scsfri.ac.cn

Tel.: +86 02089108316; fax: +86 02089022702

1 **Supplementary table 1**

Superfamily	Genera	Species	Size (bp)	Genbank No.	Identity (%)	
Scyliorhinidae	Cephaloscyllium	<i>Cephaloscyllium umbratile</i>	16896	KX354996	100	
	Scyliorhinus	<i>Scyliorhinus canicula</i>	16697	Y16067.1	88	
Proscylliidae	Proscyllium	<i>Proscyllium habereri</i>	16708	NC030216	84	
Pseudotriakidae	Pseudotriakis	<i>Pseudotriakis microdon</i>	16700	NC022735	84	
Carcharhinidae	Sphyrna	<i>Sphyrna tiburo</i>	16723	KM453976	83	
		<i>Sphyrna lewini</i>	16726	NC022679	83	
	Carcharhinus	<i>Carcharhinus acronotus</i>	16719	NC024055	83	
		<i>Carcharhinus amblyrhynchoides</i>	16705	NC023948	83	
		<i>Carcharhinus amboinensis</i>	16704	NC026696	83	
		<i>Carcharhinus brevipinna</i>	16706	NC027081	83	
		<i>Carcharhinus leucas</i>	16704	NC023522	83	
		<i>Carcharhinus longimanus</i>	16706	NC025520	83	
		<i>Carcharhinus macloti</i>	16701	NC024862	83	
		<i>Carcharhinus melanopterus</i>	16706	NC024284	83	
		<i>Carcharhinus plumbeus</i>	16706	NC024596	83	
		<i>Carcharhinus sorrah</i>	16707	NC023521	83	
		Triaenodon	<i>Triaenodon obesus</i>	16700	NC026287	83
		Glyphis	<i>Glyphis glyphis</i>	16701	NC021768	83
			<i>Glyphis garricki</i>	16702	KF646786	83
Prionace	<i>Prionace glauca</i>	16705	NC022819	83		
Lamiopsis	<i>Lamiopsis tephrodes</i>	16705	KT698047	83		
Loxodon	<i>Loxodon macrorhinus</i>	16702	NC029843	83		
Scoliodon	<i>Scoliodon laticaudus</i>	16695	KP336547	82		
Hemigaleidae	Hemigaleus	<i>Hemigaleus microstoma</i>	16701	NC029400	82	
		<i>Hemipristis elongata</i>	16691	KU508621	82	

2

3 **Supplementary table 2**

4 Primers used to verify the accuracy of the assembled mitochondrial genome sequence.

Name	Primer sequences (5'-3')	Product length (bp)	Tm (°C)
CuF1	ATGGCACTGAAGATGCTAAGATG	5126	53
CuR1	AGCTTTGAAGGCTTTTGGTCT		
CuF2	CACTTTGATAGAGTGGATAATGA	4945	53
CuR2	ATGTGCTTGGTGAGCCATTATAC		
CuF3	TGAAATTGACCATGATTATAAGCT	4992	52
CuR3	AATGGTATACCTGTGAGGGCTA		
CuF4	CTTGGTGCAACTCCAAGCAAG	5064	57
CuR4	TCGTATAACCGCGGTGGCTGGCA		

5

6