



Supplementary Material

Determination and Analysis of the Complete Mitochondrial DNA Sequence of *Octopus dollfusi* (Mollusca: Cephalopoda: Octopodidae) from China

Yunjun Yan, Zhenming Lü, Tianming Wang, Yongjiu Chen, Jingwen Yang, Baoying Guo, Lihua Jiang, Changwen Wu and Liqin Liu*

National Engineering Research Center of Marine Facilities Aquaculture, College of Marine Sciences, Zhejiang Ocean University, Zhoushan, Zhejiang, 316022, China

* Corresponding author: liuliqin-666@163.com

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Supplementary Table I.- List of the cephalopods whose mt genome sequences have been identified.

Species	Accession number	Species	Accession number	Species	Accession number
<i>Architeuthis dux</i>	KC701762	<i>Loligo opalescens</i>	GQ225110	<i>Sepiella maindroni</i>	KR912215
<i>Amphioctopus aegina</i>	NC_029702	<i>Loligo bleekeri</i>	NC_002507	<i>Sepia pharaonis</i>	KC632521
<i>Allonautilus scrobiculatus</i>	KP892752	<i>Octopus conispadiceus</i>	KJ789854	<i>Sepia lycidas</i>	KJ162574
<i>Doryteuthis opalescens</i>	NC_012840	<i>Octopus bimaculatus</i>	NC_028547	<i>Sepia aculeata</i>	KF690633
<i>Dosidicus gigas</i>	EU068697	<i>Octopus bimaculoides</i>	KU295559	<i>Sepiella inermis</i>	KF040369
<i>Illex argentinus</i>	KP336702	<i>Octopus ocellatus</i>	NC_007896	<i>Sepia esculenta</i>	NC_009690
<i>Idiosepius</i>	KF647895	<i>Octopus vulgaris</i>	NC_006353	<i>Sepia officinalis</i>	NC_007895
<i>Loliolus japonica</i>	KU568467	<i>Octopus minor</i>	NC_015896	<i>Uroteuthis chinensis</i>	KT362380
<i>Loliolus beka</i>	KT254309	<i>Sepioteuthis lessoniana</i>	NC_007894	<i>Uroteuthis duvaucelii</i>	KR051264
<i>Loliolus uyii</i>	KP265013	<i>Sthenoteuthis oualaniensis</i>	NC_010636	<i>Vampyroteuthis infernalis</i>	NC_009689

Supplementary Table II.- Primers used for the mtDNA amplification of *Octopus dollfusi*.

Fragment	Primer pair	Primer sequence (5'-3')	Region	Size (bp)
D1	D1F	ATTATTACCACCTTCATTA ACT	2846-6860	4015
	D1R	ATAGCDGCACCWACTCCTGTTT		
D2	D2F	AHACYCCTGCTGTTACCAA A	6797-12363	5567
	D2R	TTACCATAGGGRTAACAGCGTA		
D3	D3F	AATCGAACAGATTYACCWAATAA A	12238-13148	911
	D3R	TGGTAGTGAAATGTTATTCGATTT		
D4	D4F	WGTTAAAGCTTATCCCYTAATAATT	13020-13899	880
	D4R	GCGGTTTTACATATCCAGTTAG		
D5	D5F	ACTCCCCTAACTGGATATGTAA	13872-14915	1044
	D5R	TTTTRTGGTGTAATKAGCACGA		
D6	D6F	GGACTTGAACCTTTTCCT	14721-15843	1340
	D6R	CTTTGGATGTRTGAAMCCTTG		
D7	D7F	CHATAATYCAATGATGACGAGA	152-2974	2823
	D7R	GCTARATCAACRGATGGTCCT		

Supplementary Table III.- The content of bases in some invertebrates.

	Species	Accession number	A (%)	T (%)	C (%)	G (%)	A+T (%)	
Arthropods	<i>Anopheles quadrimaculatus</i>	NC_000875	40.25	37.11	13.37	9.27	77.36	
	<i>Artogeia melete</i>	EU597124	40.38	39.41	12.35	7.87	79.79	
	<i>Biston panterinaria</i>	NC_020004	42.32	37.23	12.88	7.56	79.55	
	<i>Samia canningi</i>	NC_024270	39.65	40.23	12.34	7.78	79.88	
	<i>Euphausia pacifica</i>	EU587005	36.12	35.85	16.04	11.98	71.97	
	<i>Alpheus distinguendus</i>	GQ892049	32.27	27.90	25.45	14.38	60.17	
	<i>Paracyclopina nana</i>	NC_012455	37.54	33.30	15.24	13.92	70.84	
	<i>Lysiosquillina maculata</i>	DQ191683	32.75	31.09	21.42	14.73	63.84	
	<i>Phytoseiulus persimilis</i>	GQ222414	37.43	42.40	7.85	12.32	79.83	
	<i>Damon diadema</i>	FJ204233	34.82	28.38	27.11	9.69	63.2	
	<i>Habronattus oregonensis</i>	NC_005942	32.99	41.35	8.95	16.66	74.34	
	Molluscs	<i>Mytilus edulis</i>	AY484747	27.51	34.33	14.35	23.73	61.84
		<i>Crassostrea hongkongensis</i>	EU266073	28.29	37.07	13.73	20.92	65.36
<i>Limnoperna fortunei</i>		KP756905	27.35	40.87	9.56	22.20	68.22	
<i>Paphia euglypta</i>		GU269271	28.48	38.38	10.79	22.35	66.86	
<i>Haliotis laevigata</i>		NC_024562	23.85	33.93	14.90	27.32	57.78	
<i>Concholepas concholepas</i>		NC_017886	27.34	36.64	17.35	18.66	63.98	
<i>Ascobulla fragilis</i>		AY345022	30.12	36.93	15.13	17.82	67.05	
<i>Aplysia californica</i>		AY569552	28.63	37.71	15.39	18.23	66.34	
<i>Turritella bacillum</i>		NC_029717	28.85	35.88	16.21	19.06	64.73	
<i>Babylonia areolata</i>		HQ416443	29.52	37.52	16.48	16.48	67.04	
<i>Architeuthis dux</i>		NC_011581	39.40	30.32	20.86	9.41	69.72	
<i>Watasenia scintillans</i>		NC_007893	35.25	34.00	19.13	11.63	69.25	
<i>Dosidicus gigas</i>		NC_009734	37.29	32.03	20.26	10.42	69.32	
<i>Sthenoteuthis oualaniensis</i>		NC_010636	35.68	33.42	19.15	11.74	69.1	
<i>Todarodes pacificus</i>		NC_006354	38.43	34.20	17.51	9.86	72.63	
<i>Loligo bleekeri</i>		NC_002507	38.81	32.47	19.50	9.23	71.28	
<i>Sepia esculenta</i>		NC_009690	39.30	34.18	17.07	9.45	73.48	
<i>Vampyroteuthis infernalis</i>	NC_009689	40.54	37.58	14.43	7.45	78.12		
<i>Octopus ocellatus</i>	NC_007896	42.29	34.88	15.48	7.35	77.17		
<i>Octopus vulgaris</i>	NC_006353	41.15	33.72	17.56	7.58	74.87		
<i>Amphioctopus aegina</i>	NC_029702	42.35	33.27	16.69	7.51	75.62		
<i>Octopus dollfusi</i>	KX108697	42.15	33.93	16.33	7.59	76.08		

Supplementary Table IV. Length of rRNAs and control region from some species in Octopodidae.

Species	16S	12S	Control region
<i>Octopus dollfusi</i>	1304	961	926
<i>Amphioctopus aegina</i>	1303	961	600
<i>Octopus conispadiceus</i>	1403	962	970
<i>Octopus bimaculatus</i>	1402	860	1044
<i>Octopus ocellatus</i>	1346	965	1014
<i>Octopus vulgaris</i>	1355	980	713
<i>Octopus minor</i>	1412	968	930





