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MITOGENOME ANNOUNCEMENT

# Complete mitochondrial genome and phylogenetic relationship analyses of *Amphioctopus aegina* (Gray, 1849) (Cephalopoda: Octopodidae)

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**Abstract**

In this paper, the circular mitochondrial genome of *Amphioctopus aegina* (Cephalopoda: Octopodidae) was sequenced. The whole mitogenome of *A. aegina* was 15 545 base pairs (bp) in length with a base composition of 42.53% A, 33.26% T, 16.70% C, and 7.51% G. The complete mitogenome contained 13 protein-coding genes (PCGs), 2 ribosomal RNA genes, 22 transfer RNA genes, and a major non-coding region. The gene arrangements of *A. aegina* showed remarkable similarity to other Octopodidae species reported. The phylogenetic relationships were reconstructed with the concatenated sequences of the 13 PCGs of the mitochondrial genome, and illustrated that *A. aegina* had the closest genetic relatives to *A. fangsiao*.

**Keywords**

*Amphioctopus aegina*, mitochondrial genome, Octopodidae, phylogenetic relationship

**History**

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