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Protocols for "Bicolor Angelfish (*Centropyge bicolor*) genome provided first chromosome-level reference of Pomacanthidae family and clues for bi-color body formation"

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1

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ABSTRACT

The bicolor angelfish, *Centropyge bicolor*, is a kind of tropical coral reef fish that is also well-known as bicolor angelfish because of its special and beautiful two-color body. However, the mechanism of bicolor body has not been studied clearly due to the lack of high-quality genomic data. Here we assembled a chromosome-level genome of the bicolor angelfish with a total length of 650 Mb, contig N50 of 114 Kb and scaffold N50 of 4.4 Mb. Based on the genome, 21,774 protein coding genes were annotated. Furthermore, we identified several candidate gene families associated with its bicolored body developing. As we are known, our study is the first provides a chromosome-level genome as reference for the family Pomacanthidae, which would contribute to the future researches of colorful fish.

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FILES

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BGISEQ-500 WGS library construction
Version 1
by Xinming Liang, Beijing Genomics Institute
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Hi-C library preparation for the *Lateolabrax maculatus* genome
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by Chang Li
- 

The pipeline of Hi-C assembly
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by Kailong Ma
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