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Chinese mitten crab (*Eriocheir sinensis*) iron-sulphur cluster assembly protein 2 (*Es*IscA2) is differentially regulated after immune and oxidative stress challenges

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Abstract

Iron-sulphur clusters (ISCs), one of the oldest and most versatile cofactors of proteins, are involved in catalysis reactions, electron transport reactions, regulation processes as well as sensing of ambient conditions. Iron-sulphur cluster assembly protein (IscA) is a scaffold protein member of ISC formation system, which plays a significant role in the assembly and maturation process of ISC proteins. In the present study, the cDNA sequence of iron-sulphur cluster assembly protein 2 (designated as *Es*IscA2) was cloned from *Eriocheir sinensis*. The open reading frame (ORF) of *Es*IscA2 was of 507 bp, encoding a peptide of 168 amino acids with a typically conserved Fe-S domain. A tetrameric form was predicated by the SWISS-MODEL