

Molecular cloning of cDNAs encoding antioxidant enzymes
in Korean rock bream (*Oplegnathus fasciatus*)

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Antioxidant enzyme genes play a key role in cell defense against the lethal effects of oxidative stresses in animals and have an essential function which has allowed the evolution of aerobic respiration starting from an ancient form of oxygen-insensitive life. Piscine antioxidant enzymes are also involved in the rapid response to various toxic chemicals as well as many biological stresses, indicating that they could be used as biomarkers for health and aquatic environment. With the purpose for developing fine molecular probing tool to assess the stresses in marine fish, we identified three major antioxidant enzyme genes (superoxide dismutase, catalase and glutathione-S-transferase) from Korean rock bream using expressed sequence tag analysis and/or high density filter screening. Here we report the molecular information on these gene transcripts including complete sequence data and expression profiles.

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