

Accepted Manuscript

A novel effector caspase (Caspase-3/7-1) involved in the regulation of immune homeostasis in Chinese mitten crab *Eriocheir sinensis*

Chen Qu, Wen Yang, Qingsong Xu, Jiejie Sun, Mengmeng Lu, Ying Wang, Chao Liu, Weilin Wang, Lingling Wang, Linsheng Song



PII: S1050-4648(18)30549-7

DOI: [10.1016/j.fsi.2018.09.013](https://doi.org/10.1016/j.fsi.2018.09.013)

Reference: YFSIM 5534

To appear in: *Fish and Shellfish Immunology*

Received Date: 30 June 2018

Revised Date: 26 August 2018

Accepted Date: 5 September 2018

Please cite this article as: Qu C, Yang W, Xu Q, Sun J, Lu M, Wang Y, Liu C, Wang W, Wang L, Song L, A novel effector caspase (Caspase-3/7-1) involved in the regulation of immune homeostasis in Chinese mitten crab *Eriocheir sinensis*, *Fish and Shellfish Immunology* (2018), doi: 10.1016/j.fsi.2018.09.013.

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

A novel effector caspase (Caspase-3/7-1) involved in the regulation of immune homeostasis in Chinese mitten crab *Eriocheir sinensis*

Chen Qu^{a,c#}, Wen Yang^{a#}, Qingsong Xu^a, Jiejie Sun^a, Mengmeng Lu^a, Ying Wang^a,
Chao Liu^a, Weilin Wang^a, Lingling Wang^{a,b}, Linsheng Song^{a,b,c*}

^a Liaoning Key Laboratory of Marine Animal Immunology, Dalian Ocean University,
Dalian 116023, China

^b Laboratory of Marine Fisheries Science and Food Production Processes, Qingdao
National Laboratory for Marine Science and Technology, Qingdao 266235, China

^c Liaoning Key Laboratory of Marine Animal Immunology & Disease Control, Dalian
Ocean University, Dalian 116023, China

[#] Equal contribution to this work

Abstract

Caspases are a conserved family of cysteine proteases characterized by specificity for aspartic acid and play an essential role in cell apoptosis. In the present study, a novel effector caspase (designated as *EsCaspase-3/7-1*) was identified from Chinese mitten crab *Eriocheir sinensis*. The open reading frame of *EsCaspase-3/7-1* cDNA was of 972 bp, encoding a polypeptide of 323 amino acids. *EsCaspase-3/7-1* contained an N-terminal prodomain and a conservative C-terminal CASc domain, with the conserved active site “QACRG”. The mRNA transcripts of *EsCaspase-3/7-1* were constitutively expressed in all the examined tissues with high expression level in hemocytes, hepatopancreas and gill. The *EsCaspase-3/7-1* protein was mainly

Download English Version:

<https://daneshyari.com/en/article/10148312>

Download Persian Version:

<https://daneshyari.com/article/10148312>

[Daneshyari.com](https://daneshyari.com)