

Accepted Manuscript

Oxidized fish oil injury stress in *Megalobrama amblycephala*: Evaluated by growth, intestinal physiology, and transcriptome-based PI3K-Akt/NF- κ B/TCR inflammatory signaling

Changyou Song, Bo Liu, Pao Xu, Jun Xie, Xianping Ge, Qunlan Zhou, Cunxin Sun, Huimin Zhang, Fan Shan, Zhenfei Yang

PII: S1050-4648(18)30457-1

DOI: [10.1016/j.fsi.2018.07.049](https://doi.org/10.1016/j.fsi.2018.07.049)

Reference: YFSIM 5449

To appear in: *Fish and Shellfish Immunology*

Received Date: 9 May 2018

Revised Date: 22 July 2018

Accepted Date: 27 July 2018



Please cite this article as: Song C, Liu B, Xu P, Xie J, Ge X, Zhou Q, Sun C, Zhang H, Shan F, Yang Z, Oxidized fish oil injury stress in *Megalobrama amblycephala*: Evaluated by growth, intestinal physiology, and transcriptome-based PI3K-Akt/NF- κ B/TCR inflammatory signaling, *Fish and Shellfish Immunology* (2018), doi: 10.1016/j.fsi.2018.07.049.

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.

Oxidized fish oil injury stress in *Megalobrama amblycephala*: evaluated by growth, intestinal physiology, and transcriptome-based PI3K-Akt/NF- κ B/TCR inflammatory signaling

Changyou Song^{a,b}, Bo Liu^{a,b,*}, Pao Xu^{a,b,**}, Jun Xie^{a,b}, Xianping Ge^{a,b}, Qunlan Zhou^b, Cunxin Sun^b, Huimin Zhang^a, Fan Shan^a, Zhenfei Yang^a

^a Wuxi Fisheries College, Nanjing Agricultural University, Wuxi, 214081, China

^b Key Laboratory of Freshwater Fisheries and Germplasm Resources Utilization, Ministry of Agriculture, Freshwater Fisheries Research Center, Chinese Academy of Fishery Sciences, Wuxi, 214081, China

First author: Chanyou Song, E-mail: songcy17@gmail.com

Corresponding authors: * Bo Liu, E-mail: liub@ffrc.cn. ** Pao Xu, E-mail: xup@ffrc.cn.

Present address of all authors: Wuxi Fisheries College, Nanjing Agricultural University, No. 9 Shanshui East Road, Wuxi 214081 FFRC CAFS, PR China.

Abbreviations: TLR2, toll-like receptor 2; PI3K, phosphatidylinositol-4,5-bisphosphate 3-kinase ; Akt, RAC serine/threonine-protein kinase; NF- κ B, nuclear factor kappa-light-chain-enhancer of activated B cells; MHCII- β , major histocompatibility complex, class II beta chain; TCR- α , tumor necrosis factor superfamily, member 2; TGF- β , transforming growth factor beta; TNF- α , tumor necrosis factor alpha; IL-1 β , interleukin 1 beta; IL-6, interleukin 6; IL-12, interleukin 12; GPx1, glutathione peroxidase 1; GSTm, glutathione S-transferase mu; GSH, glutathione; GSH-Px, glutathione peroxidase; ASAFR, anti-superoxide anion free radical compound; T-SOD, total superoxide dismutase; MDA, malondialdehyde.

Download English Version:

<https://daneshyari.com/en/article/8498153>

Download Persian Version:

<https://daneshyari.com/article/8498153>

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