Reviewer’s report

Title: Anti-inflammatory effects of sargachromenol-rich ethanolic extract of Myagropsis myagroides on lipopolysaccharide-stimulated BV-2 cells

Version: 1 Date: 11 March 2014

Reviewer: Yin-Ching Chan

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General comment
In this study, the authors evaluated the inhibitory effect of sargachromenol-rich ethanolic extract of Myagropsis on BV-2 cells, and also investigated the possible molecular mechanisms underlying its anti-inflammatory action. The results showed the sargachromenol-rich MME inhibits the production of NO, PGE2, and pro-inflammatory cytokines as well as iNOS and COX-2 at transcriptional and translational levels. Moreover, the inhibitory effect of MME was associated with inactivation of the NF-κB pathway via blocking the phosphorylation of ERKs and JNKs. The authors had used similar experimental design to evaluate effects of different fraction extract of MME on RAW 264.7 cells, murine macrophages and mouse ear edema. And also obtained positive and rational results. However, this manuscript was adequately defined, described, and the discussion and conclusions were supported by the data with well balanced.

Discretionary Revisions
In P18 line 14, the authors mentioned “However, anti-inflammatory activity of MME in this study would not due to fucoxanthin, fatty acid or phlorotannins, since anti-inflammatory activities of those compounds were much lower than MME.” How to prove this speculation?