Accepted Manuscript

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PII: S1098-8823(17)30077-1 DOI: http://dx.doi.org/10.1016/j.prostaglandins.2017.09.003

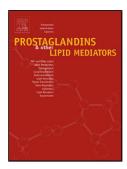
Reference: PRO 6250

To appear in: Prostaglandins and Other Lipid Mediators

Received date: 28-5-2017 Revised date: 2-8-2017 Accepted date: 12-9-2017

Please cite this article as: Li Haoming, Yang Qingqing, Han Xiao, Tan Xuefeng, Qin Jianbing, Jin Guohua.Low-dose DHA-induced astrocyte proliferation can be attenuated by insufficient expression of BLBP in vitro. *Prostaglandins and Other Lipid Mediators* http://dx.doi.org/10.1016/j.prostaglandins.2017.09.003

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Low-dose DHA-induced astrocyte proliferation can be attenuated by

insufficient expression of BLBP in vitro

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Highlights

Low-dose but not high-dose DHA stimulated astrocytes proliferation, and this effect was

ascribed to increased S-phase cells

BLBP could regulate astrocytes proliferation directly, independently of DHA.

The Low-dose DHA-induced cell proliferation at least partly relied on its receptor BLBP.

Abstract

Docosahexaenoic acid (DHA) is an n-3 long chain polyunsaturated fatty acid (PUFA) that is

involved in a wide range of cellular processes in human cells. Brain lipid binding protein (BLBP)

exhibits a high affinity for n-3 PUFAs, especially DHA, but the precise functional contributions of

DHA and BLBP in astrocytes are not clear. We analyzed cell viability and the ratio of Ki67

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