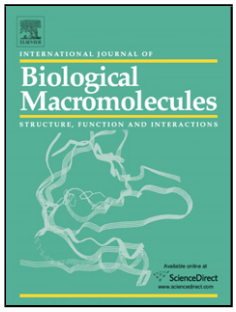

Title: Lactoferrin Promotes MC3T3-E1 Osteoblast Cells Proliferation via MAPK Signaling Pathways

Authors: Meng Liu, Fengjiao Fan, Pujie Shi, Maolin Tu, Cuiping Yu, Chenxu Yu, Ming Du

PII: S0141-8130(17)32656-9
DOI: http://dx.doi.org/10.1016/j.ijbiomac.2017.08.151
Reference: BIOMAC 8144

To appear in: *International Journal of Biological Macromolecules*

Received date: 21-7-2017
Revised date: 28-8-2017
Accepted date: 28-8-2017

Please cite this article as: Meng Liu, Fengjiao Fan, Pujie Shi, Maolin Tu, Cuiping Yu, Chenxu Yu, Ming Du, Lactoferrin Promotes MC3T3-E1 Osteoblast Cells Proliferation via MAPK Signaling Pathways, International Journal of Biological Macromoleculeshttp://dx.doi.org/10.1016/j.ijbiomac.2017.08.151

Lactoferrin Promotes MC3T3-E1 Osteoblast Cells Proliferation via MAPK Signaling Pathways

Meng Liu[1], Fengjiao Fan[1], Pujie Shi[1], Maolin Tu[1], Cuiping Yu[2], Chenxu Yu[2, 3], Ming Du[2*]

[1]School of Chemistry and Chemical Engineering, Harbin Institute of Technology, Harbin 150090, China;

[2]School of Food Science and Technology, National Engineering Research Center of Seafood, Dalian Polytechnic University, Dalian 116034, China;

[3] Department of Agricultural and Biosystems Engineering, Iowa State University, Ames, IA 50010, USA;

[*]**Corresponding author:** Prof. Ming Du, School of Food Science and Technology, National Engineering Research Center of Seafood, Dalian Polytechnic University, Dalian 116034, China; Tel: +86-411-86332275; Fax: +86-411-86323262; E-mail: duming@dlpu.edu.cn.

Abstract：Lactoferrin has attracted great attention as a potential functional factor to prevent osteoporosis due to its various bioactivities. However, the molecular mechanism underlining the osteogenic activity of lactoferrin is unclear. In this study, effect of lactoferrin on MC3T3-E1 osteoblast cells proliferation was determined using MTT assay,