

Accepted Manuscript

Inhibition on the growth of human MDA-MB-231 breast cancer cells *in vitro* and tumor growth in a mouse xenograft model by Se-containing polysaccharides from *Pyracantha fortuneana*

Chengfu Yuan, Changdong Wang, Junjie Wang, Vikas Kumar, Firoz Anwar, Fangxiang Xiao, Gohar Mushtaq, Yufei Liu, Mohammad Amjad Kamal, Ding Yuan

PII: S0271-5317(16)30500-0
DOI: doi: [10.1016/j.nutres.2016.09.012](https://doi.org/10.1016/j.nutres.2016.09.012)
Reference: NTR 7682

To appear in: *Nutrition Research*

Received date: 9 April 2016
Revised date: 15 September 2016
Accepted date: 29 September 2016



Please cite this article as: Yuan Chengfu, Wang Changdong, Wang Junjie, Kumar Vikas, Anwar Firoz, Xiao Fangxiang, Mushtaq Gohar, Liu Yufei, Kamal Mohammad Amjad, Yuan Ding, Inhibition on the growth of human MDA-MB-231 breast cancer cells *in vitro* and tumor growth in a mouse xenograft model by Se-containing polysaccharides from *Pyracantha fortuneana*, *Nutrition Research* (2016), doi: [10.1016/j.nutres.2016.09.012](https://doi.org/10.1016/j.nutres.2016.09.012)

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.

Inhibition on the growth of human MDA-MB-231 breast cancer cells *in vitro* and tumor growth in a mouse xenograft model by Se-containing polysaccharides from *Pyracantha fortuneana*

Chengfu Yuan^{a,c,*}, Changdong Wang^b, Junjie Wang^c, Vikas Kumar^d, Firoz Anwar^e, Fangxiang Xiao^a, Gohar Mushtaq^e, Yufei Liu^{f,*}, Mohammad Amjad Kamal^{g,h,i}, Ding Yuan^{c,*}

^a College of Medical Science, China Three Gorges University, Yichang, HuBei 443002, China

^b Molecular Medicine & Cancer Research Center, Chongqing Medical University, Chong qing 400016, China

^c Renhe Hospital, China Three Gorges University, Yichang, HuBei 443002, China

^d Department of Pharmaceutical Sciences, Faculty of Health Sciences, Sam Higginbottom Institute of Agriculture, Technology & Sciences, Allahabad, Uttar Pradesh 211007, India

^e Department of Biochemistry, Faculty of Science, King Abdulaziz University, P.O. Box: 80200, Jeddah 21589, Saudi Arabia

^f Department of Pathology, The First College of Clinical Medical Science, China Three Gorges University, Yichang, Hubei 443001, China

^g King Fahd Medical Research Center, King Abdulaziz University, Jeddah 21589, Saudi Arabia

^h Enzymoics; ⁱ Novel Global Community Educational Foundation, 7 Peterlee Place, Hebersham, NSW 2770, Australia

*Corresponding authors:

Dr. Chengfu Yuan, China Three Gorges University, Yichang, HuBei 443002, China. Tel.: +86-717-6396818; Fax: +86-717-6396818; Email address: yuancf46@ctgu.edu.cn;

Dr. Ding Yuan, China Three Gorges University, Yichang, HuBei 443002, China. Tel.: +86-717-6396558; Fax: +86-717-6396558; Email address: yuancf46@163.com;

Dr. Yufei Liu, Department of Pathology, The First College of Clinical Medical Science, China Three Gorges University, Yichang, Hubei 443001, China. Email address: lyf20041016@sohu.com

Abbreviations: Se-PFPs, selenium-enriched *pyracantha fortuneana* (Maxim.) Li polysaccharides; HPLC, high performance liquid chromatography; LDH, lactate dehydrogenase; MTT, 3-(4,5-Dimethylthiazol-2-yl)-2,5-diphenyltetrazolium bromide; DMSO, dimethyl sulfoxide; BSA, bovine serum albumin; PI, propidium iodide; PARP, poly (ADP-ribose) polymerase; DMEM, dulbecco modified eagle medium; DAPI, 4',6-diamidino-2-phenylindole; b.w., body weight; RIPA, radio-immuno precipitation assay

Download English Version:

<https://daneshyari.com/en/article/5588653>

Download Persian Version:

<https://daneshyari.com/article/5588653>

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