Sriklung K et al., Nat Prod Chem Res 2018, Volume 6
DOI: 10.4172/2329-6836-C1-019

Anti-inflammatory activity of Lupalbigenin from *Derris scandens* in RAW 264.7 cells

Sriklung K, Samosorn S, Apiratikul N and **Watanapokasin R**
Srinakharinwirot University, Thailand

The dried stem of *Derris scandens* Benth. (*Leguminosae*) is well known as an Asian medicinal plant and is used for a variety of aliments. The extracts using organic solvents have been reported for anti-cancer activity in human lung cancer cells. However, the anti-inflammatiory molecular mechanism of *Derris scandens* extract is still unknown. Our work is focused on *in vitro* anti-inflammatory activity of Lupalbigenin in Raw 264.7 cells using 1 ug/ml lipopolysaccharide (LPS) for 24 hrs to induce cell changes. The results showed that Lupalbigenin at concentrations of 5 uM and below had no cytotoxicity with the macrophages. Subsequently, the macrophage cells were pre-treated with 5, 2.5 and 1.25 uM concentrations of Lupalbigenin for 2 hrs and after being incubated with 1 ug/ml LPS for 24 hrs, the results showed that at 1.25 uM of Lupalbigenin the protein expression levels of iNOS, COX-2 and TNF-α were decreased. The results indicate that Lupalbigenin appears to decrease the inflammatory activity level. Further experiments on anti-inflammatory gene expressions and signalling pathway will be studied.

Biography

Sriklung K has completed a B A in Microbiology, at the Faculty of Science, Chiang Mai University, Thailand. She has over five years of experience as an Assistant Researcher at the National Center for Genetic Engineering and Biotechnology. She commenced her PhD in Molecular Biology at the Faculty of Medicine, Srinakharinwirot University, Bangkok in 2012. In 2014, She was awarded a 3.5 year PhD Scholarship by the Thai Goverment. In 2016, she was awarded the Newton Fund PhD Placement Scholarship to perform research in the Faculty of Pharmacology, Nottingham University, UK for a 15 month period. She expects to complete his/her PhD in 2018 at Srinakharinwirot University, Bangkok. She has co-authored five publications on anti-cancer activity and one on anti-inflammortory signalling pathway.

kanlayaneedd@gmail.com

Notes: