

Screening of Inhibition Activity of LPS-induced NO Production by Ethanol Extracts from Jeju Island Native Plants and Algae

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Herbal medicines have been used as a basic means of clinical trial throughout history, and traditional medicines are targeted to seek functional components. To discover new cosmetic or food ingredients among numerous natural resources from Jeju island, we screened for inhibition activity against nitric oxide (NO) production in lipopolysaccharide (LPS)-stimulated RAW 264.7 cells. Although NO formation plays an important role to relax vascular muscles or eliminate tumors, NO produced excessively in inflammatory condition can cause metabolic diseases or inflammatory dysfunctions. Among 52 natural resources ethanol extracts, 5 extracts inhibited NO production over 25% compared to only LPS-treated control at the concentration of 100 $\mu\text{g/mL}$. In further study, we try to investigate other bio-activities and the phytochemicals of 5 different extracts as useful ingredients for cosmetics or functional foods.

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