Natural Products

ChemFaces

Neoechinulin A Datasheet

4th Edition (Revised in July, 2016)

[Product Information]

Name: Neoechinulin A

Catalog No.: CFN98823

Cas No.: 51551-29-2

Purity: > 95%

M.F: $C_{19}H_{21}N_3O_2$

M.W: 323.39

Physical Description: Powder

Synonyms:(3S)-3 α -Methyl-6-[(Z)-[2-(1,1-dimethyl-2-propenyl)-1H-indole-3-yl]methylene]hexahydropyrazine-2,5-dione;(6S)-3-[(Z)-[2-(1,1-Dimethyl-2-propenyl)-1H-indol-3-yl]methylene]-6-methyl-2,5-piperazinedione;Neochinulin A.

[Intended Use]

1. Reference standards;
2. Pharmacological research;
3. Synthetic precursor compounds;
4. Intermediates & Fine Chemicals;
5. Others.

[Source]

From *Aspergillus chevalieri.*

[Biological Activity or Inhibitors]

Neoechinulin A, an indole alkaloid isolated from marine-derived Microsporum sp., can attenuate microglial activation by oligomeric amyloid-β 1–42 (Aβ42), it significantly inhibits the generation of reactive oxygen and nitrogen species in Aβ42-activated BV-2 microglia cells, it also suppresses the production of neurotoxic inflammatory mediator tumour necrosis factor-α (TNF-α), interleukin-1β (IL-1β), interleukin-6 (IL-6), and prostaglandin E 2 (PGE 2) in activated BV-2 cells; regulation of these signalling pathways have most probably contributed to the anti-inflammatory activity of neoechinulin A, suggests that with further studies neoechinulin A have a potential to be developed as a modulator of neuroinflammatory process in Alzheimer's disease. [1]

Neoechinulin A has anti-inflammatory effects in LPS-stimulated RAW264.7 macrophages through the inhibition of the NF-κB and p38 MAPK pathways, suggests that it may be a potential therapeutic agent for the treatment of various inflammatory diseases.[2]

[Solvent]

Chloroform, Dichloromethane, Ethyl Acetate, DMSO, Acetone, etc.

[HPLC Method][3]

Mobile phase: Acetonitrile- 0.1% Phosphoric acid H2O=63:37;

Flow rate: 1.0 ml/min;

Column temperature: 30 ℃;

The wave length of determination: 225 nm.

[Storage]

2-8℃, Protected from air and light, refrigerate or freeze.

[References]

[1]Pradeep Dewapriya, Yong-Xin Li, S.W.A. Himaya,*et al. Neurotoxicology, 2012, 35(1):*

30-40.

[2] Kim KS, Cui X, Lee DS,*et al. Molecules, 2013, 18(11):13245-59.*

[3]Wang Q, Zhao Y, Gao X, *et al. Chinese Journal of Chromatography, 2009, 27(4): 509-12.*

[Contact]

Address:
S5-3 Building, No. 111, Dongfeng Rd.,
Wuhan Economic and Technological Development Zone,
Wuhan, Hubei 430056,
China

Email: info@chemfaces.com
Tel: +86-27-84237783
Fax: +86-27-84254680
Web: www.chemfaces.com
Tech Support: service@chemfaces.com