Natural Products

ChemFaces

Dehydrocorydaline Datasheet

4th Edition (Revised in July, 2016)

[Product Information]

Name: Dehydrocorydaline

Catalog No.: CFN90407

Cas No.: 83218-34-2

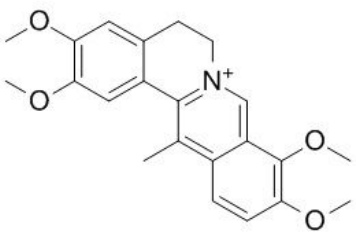
Purity: >=98%

M.F: $C_{22}H_{24}NO_4$

M.W: 366.4

Physical Description: Powder

Synonyms: Hexadehydrothalictrifoline.



[Intended Use]

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

[Source]

The tubers of *Corydalis ambigua.*

[Biological Activity or Inhibitors]

Dehydrocorydaline (DHC) isolated from Corydalis Tuber (tuber of *Corydalis*

turtschaninovii forma yanhusuo), has been screened for activity against types I-IV allergic reactions; in a type I allergic models, DHC not only inhibits antibody-mediated allergic reactions but also influences cell-mediated allergia reactions, and the inhibitory effect of Corydalis Tuber on allergic reactions may be partially attributed to DHC.[1]

Dehydrocorydaline inhibits elevated mitochondrial membrane potential in lipopolysaccharide(LPS)-stimulated macrophages, may be a novel target to specifically reduce viability and suppress cytokine production in LPS-stimulated macrophages.[2]

Dehydrocorydaline has anti-inflammatory activity, it exhibits an inhibitory effect on the edema derived by serotonin or bradykinin but no effect on the edema derived by histamine; it also shows inhibitory effects on the increase of ear edema induced by arachidonic acid (AA) and its metabolites, mixture of prostaglandin E_2 (PGE_2) and leukotriene C_4 (LTC_4). [3]

Dehydrocorydaline has antinociceptive effects in mouse models of inflammatory pain involve the opioid receptor and inflammatory cytokines.[4]

Dehydrocorydaline may inhibit platelet aggregation through increasing cAMP and decreasing cGMP concentration in rabbit platelets.[5]

Dehydrocorydaline promotes myogenic differentiation via p38 MAPK activation, it may be considered a potential therapeutic compound for the improvement of muscle stem cell regenerative capacity in injured muscle.[6]

[Solvent]

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

[HPLC Method][7]

Mobile phase: Acetonitrile-0.2% Acetic acid H2O=18: 82 ;

Flow rate: 1.0 ml/min;

Column temperature: 30 ℃;

The wave length of determination: 340 nm.

[Storage]

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

[References]

[1] Matsuda H, Tokuoka K, Wu J, *et al. Biol.Pharm. Bull., 1997, 20(4):431- 4.*

[2] Ishiguro K, Ando T, Maeda O*, et al. Int. Immunopharmacol., 2011, 11(9):1362-7.*

[3] Matsuda H, Tokuoka K, Wi J*, et al. Nat. Med., 1997, 51:293-7.*

[4] Yin Z Y, Li L, Chu S S, *et al.Sci. Rep.-UK, 2016, 6:27129.*

[5] Ding S, He L, Fan X T. *Medical Journal of Chinese Peoples Health, 2007, 19(6): 165-165.*

[6] Yoo M, Yoo M, Lee S, *et al. Mol. Med. Rep.s, 2016, 14(4):3029-36.*

[7] Chen F, Ye Y P, Li XY, *et al. Chinese Journal of Modern Applied Pharmacy, 2009,26(1): 58-60.*

[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