Natural Products

ChemFaces

Artemisinic acid Datasheet

4th Edition (Revised in July, 2016)

[Product Information]

Name: Artemisinic acid

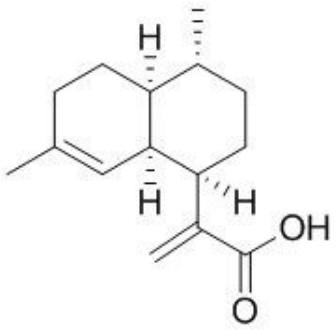
Catalog No.: CFN97276

Cas No.: 80286-58-4

Purity: 98%

M.F: $C_{15}H_{22}O_2$

M.W: 234.3



Physical Description: Powder

Synonyms: 4,11(13)-Cadinadien-12-oic acid. 4,11(13) -Amorphadien-12-oic acid; 1-Naphthaleneacetic-acid,1,2,3,4,4a,5,6,8a-octahydro-4,7-dimethyl-alpha-methylene-,1R -(1alpha,4beta,4abeta,8abeta)) .

[Intended Use]

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

[Source]

The herb of *Artemisia annua L.*

[Biological Activity or Inhibitors]

Artemisinic acid, is the immediate precursor of the semi-synthesis artemisinin, could be a cost-effective, environmentally friendly, high-quality and reliable source of artemisinin;and artemisinin is highly effective against multi-drug-resistant Plasmodium spp. [1]

Artemisinic acid was studied as a novel elicitor to enhance the yield of terpenoid indole alkaloids, artemisinic acid can up-regulate the transcriptions of tryptophan decarboxylase, geraniol10-hydroxylase,tabersonine 16-hydroxylase and deacetoxyvindoline 4-hydroxylase.[2]

Artemisinic acid is a regulator of adipocyte differentiation and C/EBP δ expression, it can inhibit adipogenic differentiation of hAMSCs by occurs primarily through reduced expression of δ, which is mediated by the inhibition of and suggest that artemisinic acid may be used as a complementary treatment option for associated with metabolic syndrome.[3]

[Solvent]

Pyridine, DMSO, Methanol.

[HPLC Method][4]

Mobile phase: Acetonirile- 0.2% Phosphoric acid H2O=65:35 ;

Flow rate: 1.0 ml/min;

Column temperature: Room Temperature;

The wave length of determination: 220 nm.

[Storage]

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

[References]

[1] Ro DK; Paradise EM, Ouellet M; Fisher KJ, Newman KL, *et al . Nature, 2006, 440*

(440):940-3.

[2] Liu J, Zhu J, Tang L, *et al. World J Microb. Biot., 2013, 30(1):175-80*.

[3] Lee J, Kim M, Lee J, *et al. J. Cell Biochem., 2012, 113(7):2488-99.*

[4] Sun J C, Zeng J L, Zhao B, *et al. Nat. Prod. Res. Develop., 2010, 22(5):845-6*.

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