



Atractyloside A Datasheet

4th Edition (Revised in July, 2016)

[Product Information]

Name: Atractyloside A

Catalog No.: CFN98560

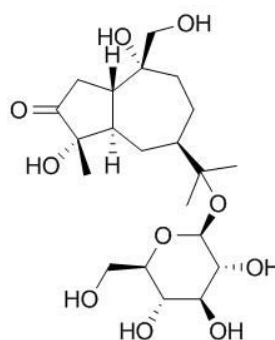
Cas No.: 126054-77-1

Purity: > 98%

M.F: C₂₁H₃₆O₁₀

M.W: 448.5

Physical Description: Powder



Synonyms: (1S,3aS,4R,7R,8aR)-7-[1-(beta-D-Glucopyranosyloxy)-1-methylethyl]octahydro-1,4-dihydroxy-4-(hydroxymethyl)-1-methyl-2(1H)-azulenone.

[Intended Use]

1. Reference standards;
2. Pharmacological research;
3. Food and cosmetic research;
4. Synthetic precursor compounds;
5. Others.

[Source]

The herb of *Atractylodes lancea*.

[Biological Activity or Inhibitors]

Atractyloside is a toxic compound from *wedelia glauca*.^[1]

Atractyloside acts as inhibitor of oxidative phosphorylation by a specific interference with energy-transfer reactions, the competition between atractyloside and ADP on oxygen and phosphate uptake by mitochondria would seem to indicate that the effect of atractyloside is due to inhibition of the ADP utilizing process in the coupling system.^[2]

Atractyloside, has been proposed for the antibiotic oligomycin, is an inhibitor of the energy-transfer reactions in animal mitochondria; it inhibits the phosphate uptake and the respiratory stimulation induced by P1-acceptor, but it does not interfere with the so-called resting respiration.^[3]

[Solvent]

Pyridine, Methanol, Ethanol, etc.

[HPLC Method]^[4]

Mobile phase: Acetonitrile-0.01M NaH₂PO₄ (pH 6), gradient elution ;

Flow rate: 1.0 ml/min;

Column temperature: 35 °C;

The wave length of determination: 203 nm.

[Storage]

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

[References]

[1] Schteingart C D, Pomilio A B. *J. Nat. Prod.*, 1984, 47(6):1046-7.

[2] Bruni A, Luciani S, Contessa A R. *Nature*, 1964, 201(4925):36.

[3] Bruni A, Contessa A R, Luciani S. *B. B. A.* 1962, 60(2):301-11.

[4] Duo R, Chen Y, Liu Y, *et al.* *China Journal of Chinese Materia Medica*, 2012, 37(15):2313-6.

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