Natural Products

ChemFaces

Calystegine B1 Datasheet

4th Edition (Revised in July, 2016)

[Product Information]

Name: Calystegine B1

Catalog No.: CFN00164

Cas No.: 127414-86-2

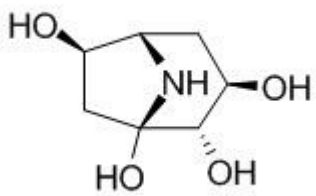
Purity: > 95%

M.F: $C_7H_{13}NO_4$

M.W: 175.18

Physical Description: Powder

Synonyms:



[Intended Use]

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

[Source]

The root bark of *Lycium chinense Mill.*

[Biological Activity or Inhibitors]

Calystegines occur in many plants of the Convolvulaceae, Solanaceae, and Moraceae

families, calystegines B1 and C1 are potent competitive inhibitors of the bovine, human, and rat beta-glucosidase activities, with Ki values of 150, 10, and 1.9 microM, respectively for B1 and 15, 1.5, and 1 microM, respectively, for C1;calystegine B2 is a strong competitive inhibitor of the alpha-galactosidase activity in all the livers; calystegines A3 and B2 selectively inhibit the rat liver beta-glucosidase activity; the potent inhibition of mammalian beta-glucosidase and alpha-galactosidase activities in vitro raises the possibility of toxicity in humans consuming large amounts of plants that contain these compounds.[1]

[Solvent]

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

[HPLC Method][2]

Mobile phase: Acetonitrile- 0. 1% Acetic acid H2O=50:50 ;

Flow rate: 0.8 ml/min;

Column temperature: 30 ℃;

The wave length of determination: 254 nm.

[Storage]

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

[References]

[1] Asano N, Kato A, Matsui K, *et al. Glycobiology, 1998, 7(8):1085-8.*

[2] Shang L, Ouyang Z, Zhao M, *et al. Chinese Journal of Experimental Traditional Medical Formulae, 2014, 20(2):47-51.*

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