[ Product Information ]

Name: Conophylline
Catalog No.: CFN99473
Cas No.: 142741-24-0
Purity: > 98%
M.F: C_{44}H_{50}N_{4}O_{10}
M.W: 794.9

Physical Description: Yellow powder.

Synonyms: Polyervine;[8,15'-Biasidospermidine]-3,3'-dicarboxylicacid,2,2',3,3'-tetradehydroy-6',7',16'-diepoxy-6,15-dihydroxy-16,17-dimethoxy-,dimethyl-ester,(5a,6b,7a,8a,12b,19a)-(5'a,6'b,7'b,12'b,19'a)-;2H,22H-Indolo[2'',3'':7',8'']pyrrolo[1'',2'',3'':1',8']quino[2',3':4,5]furo[2,3-b]oxireno[6,7]indolizino[1,8-fg]carbazole,[8,15'-biasidospermidine]-3,3'-dicarboxylic acid deriv.

[ Intended Use ]

1. Reference standards;
2. Pharmacological research;
3. Food and cosmetic research;
4. Synthetic precursor compounds;
5. Others.
The leaves of *Tabernaemontana divaricata*.

**[Biological Activity or Inhibitors]**

Conophylline, is a bis (indole) alkaloid consisting of two pentacyclic aspidosperma skeletons, plays a key role in the regulation of cell mass proliferation, maintenance of the undifferentiated state of iPSCs and also promotes iPSCs differentiated into insulin-producing cells.\[1\]

Conophylline down-regulates the expression of the TNF-α receptors on the cell surface. Conophylline is a novel differentiation inducer for pancreatic β cells, can increase the numbers of ductal cells positive for pancreatic-duodenal-homeobox protein-1 and islet-like cell clusters. \[2,3\]

Conophylline has been shown to induce differentiation of pancreatic AR42J cells and increases the formation of beta-cells.\[4\]

Conophylline suppresses pancreatic stellate cells and improves islet fibrosis in Goto-Kakizaki rats.\[5\]

Conophylline decreases the fasting blood glucose level in Goto-Kakizaki rats in a dose-dependent manner after repetitive administration for 42 days, suggests that the extract from conophylline-containing leaves may be useful as a functional food for the treatment of type 2 diabetes mellitus.\[6\]

Conophylline protects cells in cellular models of neurodegenerative diseases by inducing mTOR-independent autophagy.\[7\]

Conophylline suppresses hepatic stellate cells and attenuates thioacetamide-induced liver fibrosis in rats.\[8\]

**[Solvent]**

Chloroform, Dichloromethane, Ethyl Acetate, DMSO.
[ HPLC Method ]
Not data available.

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

[ References ]

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