
Product Data Sheet

Product Name: Neotuberostemonine

Cat. No.: GC36720

Chemical Properties

Cas. No. 143120-46-1

SMILES CC[C@@H]1[C@]2([H])[C@]3([H])[C@](C[C@]([C@](O4)([H])C[C@H](C)C4=O)([H])N3CCCC2)([H])[C@@]([C@@H]5C)([H])[C@]1([H])OC5=O

Formula	C ₂₂ H ₃₃ NO ₄	M.Wt	375.5
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Solubility	DMSO: 10 mM	Storage	Store at -20°C
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General tips For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

Structure

Background

Neotuberostemonine is an alkaloid originally isolated from *S. tuberosa* that has diverse biological activities.^{1,2,3} It inhibits LPS-induced increases in inducible nitric oxide synthase (iNOS) protein levels and NO production in RAW 264.7 cells when used at a concentration of 100 μM.¹ Neotuberostemonine (50 μM) inhibits RANKL-induced osteoclast differentiation of RAW 264.7 cells.² It reduces the citric acid-induced cough reflex in conscious guinea pigs when administered at a dose of 133 μmol/kg.³ Neotuberostemonine (40 mg/kg) inhibits pulmonary collagen deposition and fibrosis, as well as bronchoalveolar lavage fluid (BALF) monocyte and lymphocyte infiltration in a mouse model of bleomycin-induced pulmonary fibrosis.¹

1.Xiang, J., Cheng, S., Feng, T., et al. Neotuberostemonine attenuates bleomycin-induced pulmonary fibrosis by suppressing the recruitment and activation of macrophages. *Int. Immunopharmacol.* 36:158-164(2016) 2.Yun, J., Lee, K.Y., and Park, B. Neotuberostemonine inhibits osteoclastogenesis via blockade of NF-κB pathway. *Biochimie* 157:81-91(2019) 3.Chung, H.-S., Hon, P.-M., Lin, G., et al. Antitussive

Caution: Product has not been fully validated for medical applications. For research use only.

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activity of Stemona alkaloids from *Stemona tuberosa* Planta Med.69(10)914-920(2003)

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