
Product Data Sheet

Product Name: Tuberostemonine

Cat. No.: GC61360

Chemical Properties

Cas. No. 6879-01-2

SMILES [H][C@@]([C@]1([H])[C@@]23[H])(CCCCN1[C@]([H])
 ([C@@]4([H])OC([C@@H](C)C4)=O)C3)[C@@H](CC)[C@]([C@]2([H])
 [C@@H]5C)([H])OC5=O

Formula C₂₂H₃₃NO₄

M.Wt 375.5

Solubility DMSO : 50 mg/mL (133.16 mM); ultrasonic and warming and heat to 60°C

Store at -
Storage 20°C, protect from light

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**

Tuberostemonine is an alkaloid that has been found in *S. tuberosa* and has diverse biological activities.^{1,2,3} It exhibits feeding deterrent and repellent activities against *S. littoralis* fifth instar larvae when applied to lettuce leaf disks at concentrations of 0.01 and 0.1 µg/cm², respectively.¹ Tuberostemonine (100 mg/kg) reduces the number of citric acid-induced coughs in guinea pigs.² *In vivo*, tuberostemonine (1-10 mg/kg) decreases bronchoalveolar lavage fluid (BALF) neutrophil and macrophage, but not lymphocyte, infiltration and reduces peribronchial and perivascular inflammatory cell infiltration in a cigarette smoke-induced mouse model of acute lung inflammation.³

1. Brem, B., Seger, C., Pacher, T., et al. Feeding deterrence and contact toxicity of *Stemona* alkaloids—a source of potent natural insecticides. *J. Agric. Food Chem.* 50(22)6383-6388(2002) 2. Zhou, X., Leung, P.H.H., Li, N., et al. Oral absorption and

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

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antitussive activity of tuberostemonine alkaloids from the roots of *Stemona tuberosa* *Planta Med.* 75(6)575-580(2009) 3. Jung, K.-H., Beak, H., Park, S., et al. The therapeutic effects of tuberostemonine against cigarette smoke-induced acute lung inflammation in mice *Eur. J. Pharmacol.* 77480-86(2016)

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