
Product Data Sheet

Product Name: Delsoline

Cat. No.: GC38153

Chemical Properties

Cas. No. 509-18-2

SMILES O[C@@H]1C(C(N(CC)C2)C3(O)[C@H]4OC)([C@@](C[C@@]5([H])[C@@H]6OC)([H])[C@@]6([H])[C@@]3(C[C@@H]5OC)O)[C@@]4([H])[C@@]2(COC)CC1

Formula C₂₅H₄₁NO₇ M.Wt 467.6

Solubility DMSO : 6.67 mg/mL (14.26 mM; ultrasonic and warming and heat to 60°C) Storage Store at -20°C

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**

Delsoline is a diterpene alkaloid that has been found in *Delphinium* and has diverse biological activities.^{1,2,3} It inhibits binding of α -bungarotoxin to rat neuronal $\alpha 7$ nicotinic acetylcholine receptors (nAChRs; IC₅₀ = 19 μ M).¹ Delsoline (3 mg/ml) is repellent against adult red flour beetles (*T. castaneum*) in a filter paper assay.² *In vivo*, delsoline (75 mg/kg) lowers systolic blood pressure in a rat model of left renal artery ligation-induced hypertension.³

- 1.Hardick, D.J., Blagbrough, I.S., Cooper, G., et al.Nudicauline and elatine as potent norditerpenoid ligands at rat neuronal alpha-bungarotoxin binding sites: Importance of the 2-(methylsuccinimido)benzoyl moiety for neuronal nicotinic acetylcholine receptor binding. *J. Med. Chem.*39(24)4860-4866(1996)
- 2.Ulubelen, A., Meri?li, A.H., Kilin?er, N., et al.Insect repellent activity of diterpenoid alkaloids*Phytother. Res.*15(2)170-171(2001)
- 3.Lian, Q.S., and Feng, G.H.Hypotensive effect of delsoline*Zhongguo Yaoli*

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

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