

(-)-Anabasine

Chemical Properties

CAS No.:	494-52-0
Formula:	C ₁₀ H ₁₄ N ₂
Molecular Weight:	162.24
Appearance:	N/A
Storage:	0-4°C for short term (days to weeks), or -20°C for long term (months).

Biological Description

Description	Anabasine is a nicotine analog that is an alkaloid found in tree tobacco (<i>Nicotiana glauca</i>). Anabasine has been used as an industrial insecticide and, since it is present in trace amounts in tobacco smoke, its detection in urine can be used as an indicator of exposure to tobacco smoke.
Targets(IC ₅₀)	Nicotinic Receptor: None
In vivo	A mouse bioassay was used to determine the relative lethalties of S- and R-enriched anabasine enantiomers. The intravenous LD ₅₀ of the (+)-R-anabasine rich fraction was 11 +/- 1.0 mg/kg and that of the (-)-S-anabasine-rich fraction was 16 +/- 1.0 mg/kg. The LD ₅₀ of anabaseine was 0.58 +/- 0.05 mg/kg. Anabaseine was significantly more toxic in the mouse bioassay than S-anabasine (27-fold) and R-anabasine (18-fold). The relative agonistic potencies of these three alkaloids on human fetal nicotinic neuromuscular receptors were of the same rank order: anabaseine>>R-anabasine>S-anabasine.

Solubility Information

Solubility	< 1 mg/ml refers to the product slightly soluble or insoluble
------------	---

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	6.164 mL	30.819 mL	61.637 mL
5 mM	1.233 mL	6.164 mL	12.327 mL
10 mM	0.616 mL	3.082 mL	6.164 mL
50 mM	0.123 mL	0.616 mL	1.233 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 °C for 6 months; - 20 °C for 1 month. Please use it as soon as possible.

Reference

1. Lee S T , Wildeboer K , Panter K E , et al. Relative toxicities and neuromuscular nicotinic receptor agonistic potencies of anabasine enantiomers and anabaseine[J]. *Neurotoxicology & Teratology*, 2006, 28(2):220-228.

Inhibitors · Natural Compounds · Compound Libraries

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use.

Tel:781-999-4286

E-mail:info@targetmol.com

Address:36 Washington Street,Wellesley Hills,MA 02481