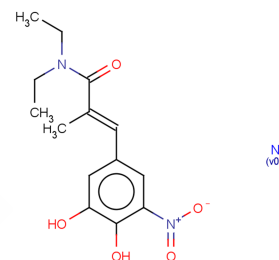


Entacapone sodium salt

Chemical Properties

CAS No. :	1047659-02-8
Formula:	C ₁₄ H ₁₅ N ₃ NaO ₅
Molecular Weight:	328.28
Storage:	Powder: -20°C for 3 years In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.



Biological Description

Description	Entacapone sodium salt inhibits catechol-O-methyltransferase(COMT) with similar IC ₅₀ in different tissues including liver, duodenum, kidney and lung, but entacapone is more active than tolcapone in those tissues. Entacapone (< 100 μM) is a potent inhibitor of α-syn and β-amyloid (Aβ) oligomerization and fibrillogenesis, and also protects against extracellular toxicity induced by the aggregation of both proteins in PC12 cells. Entacapone sodium salt is a specific, potent, peripherally acting catechol-O-methyltransferase (COMT) inhibitor with IC ₅₀ of 151 nM for PD treatment.
Targets(IC ₅₀)	Others,Transferase

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.0462 mL	15.2309 mL	30.4618 mL
5 mM	0.6092 mL	3.0462 mL	6.0924 mL
10 mM	0.3046 mL	1.5231 mL	3.0462 mL
50 mM	0.0609 mL	0.3046 mL	0.6092 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Di Giovanni, S., et al., Entacapone and tolcapone, two catechol O-methyltransferase inhibitors, block fibril formation of alpha-synuclein and beta-amyloid and protect against amyloid-induced toxicity. *J Biol Chem*, 2010. 285(20): p. 14941-54.

Jenner, P., Avoidance of dyskinesia: preclinical evidence for continuous dopaminergic stimulation. *Neurology*, 2004. 62(1 Suppl 1): p. S47-55.

Hamaue, N., et al., Entacapone, a catechol-O-methyltransferase inhibitor, improves the motor activity and dopamine content of basal ganglia in a rat model of Parkinson's disease induced by Japanese encephalitis virus. *Brain Res*, 2010. 1309: p. 110-5.

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