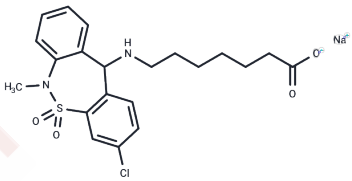
Data Sheet (Cat.No.T2402)

TargetMol

Tianeptine sodium salt

Chemical Properties



CAS No. : 30123-17-2

Formula: C21H24ClN2NaO4S

Molecular Weight: 458.93

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	Tianeptine sodium salt, a selective serotonin reuptake enhancer (SSRE), is used to treat major depressive episodes.
Targets(IC50)	MMP,NF-κB,5-HT Receptor,Opioid Receptor,Akt,iGluR,PI3K
In vitro	Tianeptine attenuates behavioral symptoms induced by peripheral, but not central, administration of LPS or IL-1β in rats. It normalizes the scaling ratio of NMDA receptor-mediated to AMPA/kainate receptor-mediated current amplitudes and prevents the stress-induced reduction in NMDA-EPSC inactivation. Tianeptine treatment prevents the increase in corticotropin-releasing factor (CRF) mRNA levels in the dBNST triggered by CMS and reduces CRF mRNA levels in the dBNST of non-stressed rats. In anesthetized rats, Tianeptine blocks stress-induced PB inhibition in the basolateral amygdala's CA1 region without affecting stress-induced LTP enhancement. Tianeptine administration under non-stress conditions enhances PB in the amygdala, hippocampus, and LTP in anesthetized rats. Tianeptine significantly decreases cell apoptosis in the rat temporal cortex and hippocampal dentate gyrus in both control and stressed animals but does not affect the Ammons horn. It notably increases extracellular concentrations of homovanillic acid and vanilmandelic acid in the nucleus accumbens and striatum. Intraperitoneal injection of 2.5 mg/kg Tianeptine in the nucleus accumbens alone increases extracellular dopamine.

Solubility Information

Solubility	H2O: 45.9 mg/mL (100.02 mM),Sonication is recommended. DMSO: 4.6 mg/mL (10.02 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 1 mg/mL (2.18 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.179 mL	10.8949 mL	21.7898 mL
5 mM	0.4358 mL	2.179 mL	4.358 mL
10 mM	0.2179 mL	1.0895 mL	2.179 mL
50 mM	0.0436 mL	0.2179 mL	0.4358 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

Kim SJ, et al. Neuropharmacology, 2006, 50(7), 824-833.
Vouimba RM, et al. Stress, 2006, 9(1), 29-40.
Castanon N, et al. Psychopharmacology (Berl), 2001, 154(1), 50-60.
Kole MH, et al. Eur J Neurosci, 2002, 16(5), 807-816.
Lucassen PJ, et al. Biol Psychiatry, 2004, 55(8), 789-796.