

TCN 213

## Chemical Properties

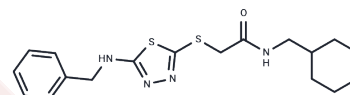
CAS No. : 556803-08-8

Formula: C<sub>18</sub>H<sub>24</sub>N<sub>4</sub>O<sub>2</sub>S

Molecular Weight: 376.54

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	TCN 213 is an antagonist of NMDA receptor that has a selective for NR1/NR2A over NR1/NR2B
Targets(IC50)	NMDAR,iGluR
In vitro	TCN 213 antagonism of GluN1/GluN2A NMDA receptors was dependent on glycine but independent of glutamate concentrations in external recording solutions. Antagonism by TCN 213 was surmountable and gave a Schild plot with unity slope. TCN 213 block of GluN1/GluN2B NMDA receptor-mediated currents was negligible. In cortical neurones, at a early developmental stage predominantly expressing GluN2B-containing NMDA receptors, TCN 213 failed to antagonize NMDA receptor-mediated currents or to prevent GluN2B-dependent, NMDA-induced excitotoxicity. In older cultures (DIV 14) or in neurones transfected with GluN2A subunits, TCN 213 antagonized NMDA-evoked currents. Block by TCN 213 of NMDA currents inversely correlated with block by ifenprodil, a selective GluN2B antagonist.

## Solubility Information

Solubility	DMSO: 30 mg/mL (79.67 mM), Sonication is recommended. ( $< 1$ mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Corn Oil: 2 mg/mL (5.31 mM), Sonication is recommended. <i>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.</i>

### Preparing Stock Solutions

---

	1mg	5mg	10mg
1 mM	2.6558 mL	13.2788 mL	26.5576 mL
5 mM	0.5312 mL	2.6558 mL	5.3115 mL
10 mM	0.2656 mL	1.3279 mL	2.6558 mL
50 mM	0.0531 mL	0.2656 mL	0.5312 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

Mckay S , Griffiths N H , Butters P A , et al. Direct pharmacological monitoring of the developmental switch in NMDA receptor subunit composition using TCN 213, a GluN2A-selective, glycine-dependent antagonist[J]. British Journal of Pharmacology, 2012, 166(3):924-937.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

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:34 Washington Street,Wellesley Hills,MA 02481