

Product Name	: TCN213
Synonyms	: —
Cat No.	: M21967
CAS Number	: 556803-08-8
Molecular Formula	: C ₁₈ H ₂₄ N ₄ O ₂
Formula Weight	: 376.54
Chemical Name	: —
Description	<p>TCN213 is an antagonist of NMDA receptor that has a selective for NR1/NR2A over NR1/NR2B. 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.</p>
Pathway	: Membrane Transporter/Ion Channel
Target	: NMDAR
Receptor	: NMDA receptor
Solubility	: —
SMILES	: <chem>O=C(CSc1nnc(NCc2ccccc2)s1)NCC1CCCCC1</chem>
Storage	: (-20°C)
Stability	: ≥ 2 years
Reference	:

1. McKay S, Griffiths NH, Butters PA, 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.