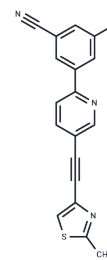


STX-107

Chemical Properties

CAS No. :	935685-90-8
Formula:	C ₁₈ H ₁₀ FN ₃ S
Molecular Weight:	319.36
Storage:	Store at low temperature Powder: -20°C for 3 years In solvent: -80°C for 1 year <small>Actual storage temperature shall be subject to the COA.</small>



Biological Description

Description	STX-107 is a potent and selective mGluR5 agonist for the study of Fragile X Syndrome.
Targets(IC50)	GluR
In vitro	Treatment of hippocampal neuron cultures with STX-107 (1 μM for 24 hours) significantly inhibited excessive mGluR5-mediated signaling and restored dendritic spine density and synaptic protein levels in FMR1-deficient mouse neurons, indicating its ability to modulate synaptic plasticity in vitro[1].
In vivo	In Fmr1 knockout mice, intraperitoneal injection of STX-107 (10 mg/kg once daily for 7 days) significantly reduced autism-like hyperactivity and excessive exploratory behavior. The compound also partially restored deficits in social interaction and abnormal startle response, demonstrating its potential to ameliorate behavioral phenotypes in vivo[1].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.1313 mL	15.6563 mL	31.3126 mL
5 mM	0.6263 mL	3.1313 mL	6.2625 mL
10 mM	0.3131 mL	1.5656 mL	3.1313 mL
50 mM	0.0626 mL	0.3131 mL	0.6263 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

Arsova A, Møller TC, Vedel L, Hansen JL, Foster SR, Gregory KJ, Bräuner-Osborne H. Detailed In Vitro Pharmacological Characterization of Clinically Tested Negative Allosteric Modulators of the Metabotropic Glutamate Receptor 5. Mol Pharmacol. 2020 Jul;98(1):49-60.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481