

Product Data Sheet

Product Name: ML-396
Cat. No.: GC46171

Chemical Properties

Cas. No. 1630936-95-6

SMILES O=C(NC1=CC(Cl)=C(OC2=CC=C(Cl)C=N2)C=C1)C3=CC=CC=N3

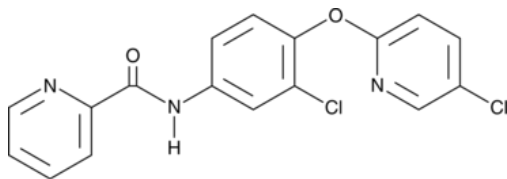
Formula C₁₇H₁₁Cl₂N₃O₂ M.Wt 360.2

Solubility DMSO : 25 mg/mL (69.41 mM; Need ultrasonic) Storage Store at -20°C

General tips For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

Structure



Background

ML-396 is a positive allosteric modulator of group III metabotropic glutamate receptors (mGluRs) with EC₅₀ values of 108, 146, and 128 nM for mGluR4, mGluR7, and mGluR8, respectively, in calcium mobilization assays.¹ ML-396 potentiates LSP4-2022-induced reductions in paired-pulse field excitatory post synaptic potential (fEPSP) slopes in mouse hippocampal slices. In vivo, ML-396 (30 mg/kg) restores hippocampal long-term potentiation, improves novel object recognition, contextual fear learning, and social memory, and decreases sleep apneas in the Mecp2^{-/-} mouse model of Rett syndrome.²

[1. Jalan-Sakrikar, N., Field, J.R., Klar, R., et al. Identification of positive allosteric modulators VU0155094 (ML397) and VU0422288 (ML396) reveals new insights into the biology of metabotropic glutamate receptor 7. ACS Chem. Neurosci. 5(12), 1221-1237 (2014).]2. Gogliotti, R.G., Senter, R.K., Fisher, N.M., et al. mGlu7 potentiation rescues cognitive, social, and respiratory phenotypes in a mouse model of Rett syndrome. Sci. Transl. Med. 9(403), (2017).

Caution: Product has not been fully validated for medical applications. For research use only.

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