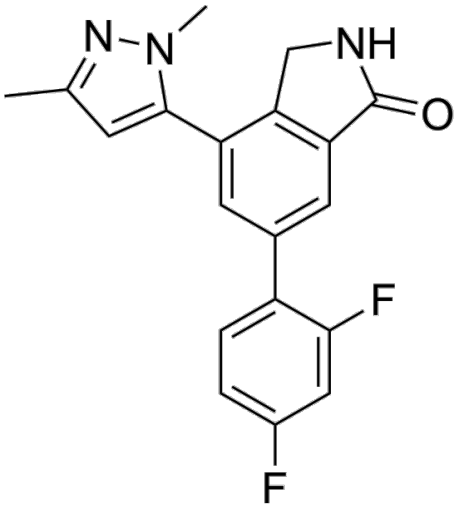
Product Data Sheet

Product Name: VU6066098
Cat. No.: GC79304

Chemical Properties

Cas. No.	3055537-47-5		
Formula	$C_{19}H_{15}F_2N_3O$	M.Wt	339.34
Solubility		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

VU6066098 is a blood-brain barrier penetrant, orally active inhibitor of metabotropic glutamate receptor subtype 2 (mGlu2), with IC_{50} values of 77 nM and 111 nM against human and rat targets, respectively. VU6066098 induces antidepressant-like activity, inhibits psychosis-like hyperlocomotion, enhances recognition memory and associative learning, and reverses cognitive deficits caused by blast-related traumatic brain injury. VU6066098 can be used in research on major depressive disorder, schizophrenia, Alzheimer's disease, and traumatic brain injury [1].

In Vivo, VU6066098 (1-10 mg/kg; p.o.; single dose) exerts rapid antidepressant-like effects in rats

with an oral minimum effective dose of 1 mg/kg, showing efficacy comparable to ketamine at 10 mg/kg p.o[1]. VU6066098 (5.6-56.6 mg/kg; p.o.; single dose) exhibits antipsychotic-like activity in rats with an oral minimum effective dose of 30 mg/kg, reversing amphetamine-induced hyperlocomotion in a dose-dependent manner[1]. VU6066098 (1-10 mg/kg; p.o.; single dose) enhances long-term recognition memory in rats with an oral minimum effective dose of 3 mg/kg, producing a robust improvement in recognition index[1]. VU6066098 (0.1-1 mg/kg; p.o.; single dose) enhances associative learning and long-term memory in rats with an oral minimum effective dose of 0.3 mg/kg, increasing percent freezing behavior in contextual fear conditioning[1]. VU6066098 (10 mg/kg; i.p.; daily; 2 days) reverses cognitive deficits in a rat blast-related TBI model when administered at 10 mg/kg i.p. for 2 days, with effects lasting up to 30 days post-dose[1].

In Vitro, VU6066098 potently and selectively inhibits human mGlu2 receptors in an mGlu2/GIRK assay with an IC_{50} of 77 nM, while showing no significant activity against most other human mGlu receptor subtypes[1]. VU6066098 inhibits human mGlu2 receptor activity in a cAMP assay with an IC_{50} of 114 nM[1]. VU6066098 potently inhibits rat mGlu2 receptors with an IC_{50} of 111 nM, while showing no significant activity against most other rat mGlu receptor subtypes[1].

References:
[1]. Coleman JS, et al. Discovery of VU6066098: A Selective and CNS-Penetrant mGlu NAM with Robust Antidepressant-, Antipsychotic-, and Procognitive-like Activity in Rodents. ACS chemical neuroscience. 2026 Jun 23.

Caution: Product has not been fully validated for medical applications. For research use only.
Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com
Address: 10292 Central Ave. #205, Montclair, CA, USA