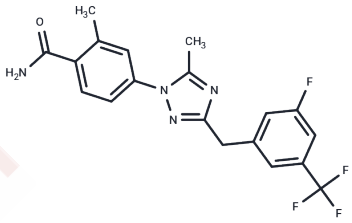
Data Sheet (Cat.No.T15352)

FTBMT

Chemical Properties



CAS No. : 1358575-02-6

Formula: C19H16F4N4O

Molecular Weight: 392.35

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	FTBMT is a selective GPR52 agonist (EC50: 75 nM) and it also has antipsychotic and procognitive properties.
Targets(IC50)	GPCR
In vitro	In CHO cells expressing human, mouse, or rat GPR52, FTBMT (0.1-10 μM) improves intracellular cAMP levels (pEC50s of 7.03, 6.85, and 6.87, respectively)[2].
In vivo	In rats, FTBMT (3 or 10 mg/kg, 48 hours) improves recognition and spatial working memory. FTBMT (30 mg/kg, 90 minutes) shows antipsychotic-like activity without causing catalepsy in mice[2]

Solubility Information

Solubility	DMSO: 45 mg/mL (114.69 mM),Sonication is recommended. H2O: < 0.1 mg/mL (insoluble) (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Corn Oil: 2 mg/mL (5.1 mM),Sonication is recommended. *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.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.5487 mL	12.7437 mL	25.4874 mL
5 mM	0.5097 mL	2.5487 mL	5.0975 mL
10 mM	0.2549 mL	1.2744 mL	2.5487 mL
50 mM	0.051 mL	0.2549 mL	0.5097 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

Tokumaru K, et al. Design, synthesis, and pharmacological evaluation of 4-azolyl-benzamide derivatives as novel GPR52 agonists. Bioorg Med Chem. 2017 Jun 15;25(12):3098-3115.
Nishiyama K, et al. FTBMT, a Novel and Selective GPR52 Agonist, Demonstrates Antipsychotic-Like and Procognitive Effects in Rodents, Revealing a Potential Therapeutic Agent for Schizophrenia. J Pharmacol Exp Ther. 2017 Nov;363(2):253-264.

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