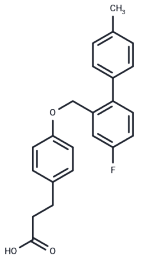
Data Sheet (Cat.No.T3433)

TargetMol

TUG-891

Chemical Properties



CAS No. : 1374516-07-0

Formula: C23H21FO3

Molecular Weight: 364.41

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Biological Description

Description	TUG-891 is a G protein-coupled receptor (GPCR) expressed in intestine, adipocytes, and pro-inflammatory macrophages that is activated by long chain free fatty acids.
Targets(IC50)	GPCR
In vitro	TUG-891 exhibits analogous signaling characteristics to the long-chain fatty acid (LCFA) α-linolenic acid at the human Free Fatty Acid receptor 4 (FFA4), stimulating Ca2+ mobilization, recruiting β-arrestin-1 and β-arrestin-2, and promoting extracellular signal-regulated kinase phosphorylation. Moreover, TUG-891 activation of FFA4 leads to the receptor's swift phosphorylation and internalization[1].
Kinase Assay	Inhibition of recombinant human Mps1 by BAY 1161909 or BAY 1217389 is assessed in TRFRET-based in vitro kinase assays via phosphorylation of a biotinylated peptide (Biotin-Ahx-PWDPDDADITEILG-NH2). Under standard assay conditions kinase and test compound are preincubated for 15 min before enzyme reaction is started by addition of substrate and ATP upon 10 μM[1].

Solubility Information

Solubility	DMSO: 40 mg/mL (109.77 mM),Sonication is recommended. H2O: < 1 mg/mL (insoluble or slightly soluble), (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.7442 mL	13.7208 mL	27.4416 mL
5 mM	0.5488 mL	2.7442 mL	5.4883 mL
10 mM	0.2744 mL	1.3721 mL	2.7442 mL
50 mM	0.0549 mL	0.2744 mL	0.5488 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.

Reference

Hudson BD, et al. The pharmacology of TUG-891, a potent and selective agonist of the free fatty acid receptor 4 (FFA4/GPR120), demonstrates both potential opportunity and possible challenges to therapeutic agonism. Mol Pharmacol. 2013 Nov;84(5):710-25.

Tel:781-999-4286 E_mail:info@targetmol.com Address:36 Washington Street,Wellesley Hills,MA 02481