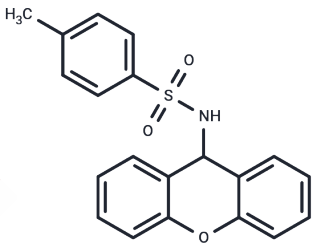
Data Sheet (Cat.No.T22027)

TargetMol

AH-7614

Chemical Properties



CAS No. : 6326-06-3

Formula: C20H17NO3S

Molecular Weight: 351.42

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	AH-7614 (AH 7614) is a selective and potent free fatty acid receptor 4 (FFA4/GPR120) antagonist.
Targets(IC50)	GPCR
In vitro	AH7614 (0.063, 0.25, and 1μM) blocked linoleic acid and GSK137647A-induced intracellular calcium increase in U2OS osteosarcoma cells expressing the FFA4 receptor. In addition, the increase of glucose-stimulated insulin secretion by GSK137647A (50 μM) was abolished in the presence of the selective FFA4 antagonist AH7614 (100 μM) in the MIN6 mouse insulinoma cell line. Moreover, AH7614 (100 μM) blocked GSK137647A (100μM)-mediated a modest increase of GLP-1 secretion in the NCIH716 cells.

Solubility Information

Solubility	DMSO: 125 mg/mL (355.7 mM),Sonication is recommended. Ethanol: Insoluble, H2O: Insoluble, (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Corn Oil: 2.5 mg/mL (7.11 mM),Sonication is recommended. 10% DMSO+90% Saline: < 10 mg/mL (28.46 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 10 mg/mL (28.46 mM),Solution. *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	2.8456 mL	14.228 mL	28.456 mL
5 mM	0.5691 mL	2.8456 mL	5.6912 mL
10 mM	0.2846 mL	1.4228 mL	2.8456 mL
50 mM	0.0569 mL	0.2846 mL	0.5691 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

Sparks SM, Chen G, Collins JL, Danger D, Dock ST, Jayawickreme C, et al. Identification of diarylsulfonamides as agonists of the free fatty acid receptor 4 (FFA4/GPR120). Bioorg Med Chem Lett. 2014;24(14):3100-3.