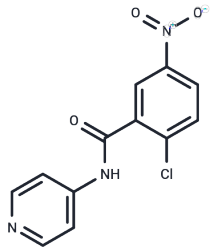
Data Sheet (Cat.No.T6689)

T0070907

Chemical Properties



CAS No. : 313516-66-4

Formula: C12H8ClN3O3

Molecular Weight: 277.66

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	T0070907(IC50=1 nM) , an effective and specific PPARγ inhibitor, with the >800-fold selectivity over PPARα and PPARδ.
Targets(IC50)	PPAR
In vivo	T0070907 can attenuate the beneficial effects of lipopolysaccharide pretreatment, such as significantly improving renal insufficiency, reducing hepatocyte damage and circulatory failure, and reducing plasma interleukin-1 elevation caused by severe endotoxemia.
Kinase Assay	Ligand Binding Assay: To determine the binding affinity of T0070907 to the PPARs, scintillation proximity assay (SPA) is performed with the following modifications. A 90-μl reaction contains SPA buffer (10 mm KH2PO4, 10 mm KH2PO4, 2 mm EDTA, 50 mm NaCl, 1 mm dithiothreitol, 2 mmCHAPS, 10% (v/v) glycerol, pH 7.1), 50 ng of GST-PPARγ (or 150 ng of GST-PPARα, GST-PPARδ), 5 nm 3H-labeled radioligands, and 5 μl of T0070907 in Me2SO. After incubation for 1 h at room temperature, 10 μl of polylysine-coated SPA beads (at 20 mg/ml in SPA buffer) are added, and the mixtureis incubated for 1 h before reading in Packard Topcount. [3H]Rosiglitazone is used for PPARγ, and [3H]GW2433 is used for PPARα and PPARδ.
Cell Research	MTS assay(Only for Reference)

Solubility Information

Solubility	DMSO: 72.14 mg/mL (259.81 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 1 mg/mL (3.6 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	3.6015 mL	18.0076 mL	36.0153 mL
5 mM	0.7203 mL	3.6015 mL	7.2031 mL
10 mM	0.3602 mL	1.8008 mL	3.6015 mL
50 mM	0.072 mL	0.3602 mL	0.7203 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

Lee G et al. J Biol Chem, 2002, 277(22), 19649-19657.
Ren Q, Xie X, Zhao C, et al. 2, 2′, 4, 4′-Tetrabromodiphenyl Ether (PBDE 47) Selectively Stimulates Proatherogenic PPARγ Signatures in Human THP-1 Macrophages to Contribute to Foam Cell Formation. Chemical Research in Toxicology. 2022
Zaytseva YY et al. Anticancer Res, 2011, 31(3), 813-823.
Collin M et al. Crit Care Med, 2006, 34(4), 1131-1138.