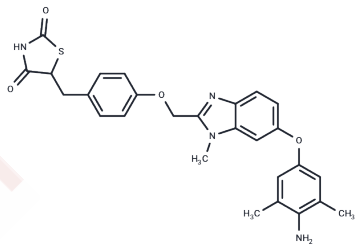
Data Sheet (Cat.No.T15581)

TargetMol

Inolitazone

Chemical Properties



CAS No. : 223132-37-4

Formula: C27H26N4O4S

Molecular Weight: 502.58

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	Inolitazone (RS5444) a high-affinity PPARγ agonist. Inolitazone exhibits IC50 for growth inhibition is ~0.8 nM in vitro.
Targets(IC50)	PPAR
In vitro	Inolitazone (10 nM) inhibits the growth of DRO cells through a PPARγ-dependent mechanism[1]. Inolitazone upregulates the cell cycle kinase inhibitor, p21WAF1/CIP1. Inolitazone (10 nM) activates PPARγ:RXRα-dependent transcription utilizing a PPRE response element fused to a luciferase reporter gene (PPRE3-tk-luc). Inolitazone specifically activates PPARγ, but not PPARα or PPARδ. Inolitazone (10 nM) following transient transfection with the appropriate PPAR isoform (γ, α, or δ) and PPAR response element linked to a luciferase reporter in RIE rat small intestinal cell line, which does not express PPARs, yields increased luciferase activity only in the presence of PPARγ and PPRE3-tk-luc[2].
In vivo	In athymic nude mice prior to DRO tumor cell implantation, Inolitazone inhibits tumor growth in a dose responsive fashion. 0.025% Inolitazone inhibits growth on day 32 by 94.4%. In the 0.0025% treatment group, tumor growth is inhibited by 62.3% while the 0.00025% dose demonstrated no growth inhibitory activity as compared to control. Inolitazone treated animals demonstrate tumor growth inhibition of 68.9% in DRO tumors and 48.3% in ARO tumors on day 35. Inolitazone plus Paclitaxel demonstrate additive antiproliferative activity in cell culture and minimal ATC tumor growth[1].

Solubility Information

Solubility	DMSO: 55 mg/mL (109.44 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.9897 mL	9.9487 mL	19.8973 mL
5 mM	0.3979 mL	1.9897 mL	3.9795 mL
10 mM	0.199 mL	0.9949 mL	1.9897 mL
50 mM	0.0398 mL	0.199 mL	0.3979 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

Marlow LA, et al. Reactivation of suppressed RhoB is a critical step for the inhibition of anaplastic thyroid cancer growth. Cancer Res. 2009 Feb 15;69(4):1536-44.
Copland JA, et al. Novel high-affinity PPARgamma agonist alone and in combination with paclitaxel inhibits human anaplastic thyroid carcinoma tumor growth via p21WAF1/CIP1. Oncogene. 2006 Apr 13;25(16):2304-17.