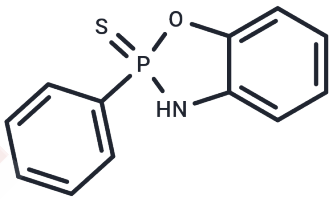
Data Sheet (Cat.No.T15361)

TargetMol

FW1256

Chemical Properties



CAS No. : 117089-08-4

Formula: C12H10NOPS

Molecular Weight: 247.25

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	FW1256 is a phenyl analog. It also a slow-releasing hydrogen sulfide (H2S) donor. FW1256 inhibits NF-κB activity and causes cell apoptosis. FW1256 shows potent anti-inflammatory effects. It also has the potential for cancer and cardiovascular disease treatment.
Targets(IC50)	Apoptosis,Others,NF-κB
In vitro	FW1256 (200 μM; 24.5 hours; AW264.7 cells) treatment obviously decreases IL-1β, COX-2, iNOS PROTE, and iNOS mRNA and protein in LPS-stimulated RAW264.7 macrophages. FW1256 reduces NF-κB activation as evidenced by reduced cytosolic phospho-IκBα levels and reduces nuclear p65 levels in LPS-stimulated RAW264.7 macrophages treated with FW1256. FW1256 concentration-dependently reduces TNF-α (IC50: 61.2 μM), IL-6 (IC50: 11.7 μM), PGE2 (IC50: 25.5 μM) and NO (IC50: 34.6 μM) generation in LPS-stimulated RAW264.7 macrophages and bone marrow-derived macrophages (BMDMs) (IC50s: 414.9 μM, 300.2 μM, 4 μM and 9.5 μM for TNF-α, IL-6, PGE2 and NO, respectively) [1].
In vivo	Treatment with FW1256 (100 mg/kg; i.p.; male C57BL/6 mice), decreases IL-1β, TNFα, nitrate/nitrite, and PGE2 levels in LPS-treated mice [1].

Solubility Information

Solubility	DMSO: 250 mg/mL (1011.12 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	4.0445 mL	20.2224 mL	40.4449 mL
5 mM	0.8089 mL	4.0445 mL	8.089 mL
10 mM	0.4044 mL	2.0222 mL	4.0445 mL
50 mM	0.0809 mL	0.4044 mL	0.8089 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

Huang CW, et al. A novel slow-releasing hydrogen sulfide donor, FW1256, exerts anti-inflammatory effects in mouse macrophages and in vivo. Pharmacol Res. 2016 Nov;113(Pt A):533-546.
Feng W, et al. Discovery of New H2S Releasing Phosphordithioates and 2,3-Dihydro-2-phenyl-2-sulfanylenebenzo [d][1,3,2]oxazaphospholes with Improved Antiproliferative Activity. J Med Chem. 2015 Aug 27;58(16):6456-80.