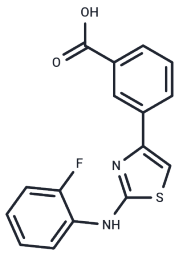
Data Sheet (Cat.No.T39965)

TargetMol

NF-κB activator 1

Chemical Properties



CAS No. : 2387524-59-4

Formula: C16H11FN2O2S

Molecular Weight: 314.33

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	NF-κB activator 1 can activate the nf-kappa B gene activator, EC50 of 0.9 microns. NF-κB is widely used in eukaryotic cells as a gene regulating cell proliferation and cell survival. NF-κB activator 1 induces superoxide dismutase (SOD) 2 1 mRNA expression.
Targets(IC50)	NF-κB
In vitro	NF-κB activator 1 (compound 32) (1 μM; 6 hours) accelerates SOD2 mRNA expression in SH-SY5Y neuroblastoma cells [1] .

Solubility Information

Solubility	DMSO: 125 mg/mL (397.67 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: < 10 mg/mL (31.81 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 10 mg/mL (31.81 mM),Suspension. 10% DMSO+90% Corn Oil: 5 mg/mL (15.91 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	3.1814 mL	15.9068 mL	31.8137 mL
5 mM	0.6363 mL	3.1814 mL	6.3627 mL
10 mM	0.3181 mL	1.5907 mL	3.1814 mL
50 mM	0.0636 mL	0.3181 mL	0.6363 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

Mathew B, et al. Structure-activity relationship (SAR) studies of N-(3-methylpyridin-2-yl)-4-(pyridin-2-yl)thiazol-2-amine (SRI-22819) as NF-B activators for the treatment of ALS [published online ahead of print, 2020 Oct 22]. Eur J Med Chem. 2020;112952.