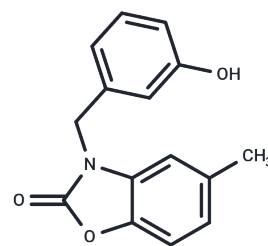


MIF098

Chemical Properties

CAS No. : 1208448-95-6
 Formula: C₁₅H₁₃NO₃
 Molecular Weight: 255.27
 Storage: Store under nitrogen
 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	MIF098, a macrophage migration inhibitory factor (MIF) antagonist, inhibits pulmonary hypertension associated with SLE and the proliferation and migration of pulmonary arterial smooth muscle cells (PASMC). MIF098 may also be used to study idiopathic pulmonary hypertension.
Targets(IC50)	Others,MIF
In vitro	In a concentration-dependent manner, MIF098 (0-10 μM, 48 h) inhibits mPASMC cell proliferation and migration by blocking the migration inhibitory factor (MIF) pathway[1]. By inhibiting the TGFβ1/Smad2/3 pathway, MIF098 reduces collagen synthesis and pulmonary artery fibrosis [1].
In vivo	Administered through intraperitoneal injection at a dose of 40 mg/kg once a day for 4 weeks, MIF098 attenuates the progression of hypoxia-induced pulmonary arterial hypertension in C57BL/6J mice [1].

Solubility Information

Solubility	DMSO: 100 mg/mL (391.74 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% PBS: 5 mg/mL (19.59 mM),Suspension. <i>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.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.9174 mL	19.5871 mL	39.1742 mL
5 mM	0.7835 mL	3.9174 mL	7.8348 mL
10 mM	0.3917 mL	1.9587 mL	3.9174 mL
50 mM	0.0783 mL	0.3917 mL	0.7835 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

HuijingHuang, et al. The small molecule macrophage migration inhibitory factor antagonist MIF098, inhibits pulmonary hypertension associated with murine SLE. *Int Immunopharmacol.* 2019 Nov;76:105874.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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