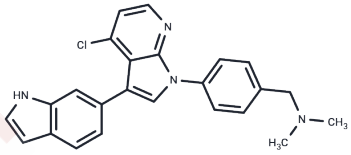
Data Sheet (Cat.No.T40137)

TargetMol

MPO-IN-1

Chemical Properties



CAS No. : 2471981-21-0

Formula: C24H21ClN4

Molecular Weight: 400.9

Storage: Store at low temperature
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	MPO-IN-1 is an orally active myeloperoxidase (MPO) inhibitor, inhibiting MPO and thyroid peroxidase (TPO). It is useful in inflammation research.
Targets(IC50)	Glutathione Peroxidase
In vitro	MPO-IN-1 is an irreversible indole-containing myeloperoxidase (MPO) inhibitor with an IC50 of 2.6 μM. [1]
In vivo	The plasma concentration of mice was reduced in a biphasic manner after intravenous administration of MPO-IN-1 (1 mg/kg). The mean plasma elimination half-life (T1/2) was 2.6 h. Mpo-in-1 (5 mg/kg or 90 mg/kg orally) causes up-regulation of MPO activity IN the coated exudate in mice. [1]

Solubility Information

Solubility	DMSO: 160 mg/mL (399.1 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: 5 mg/mL (12.47 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	2.4944 mL	12.4719 mL	24.9439 mL
5 mM	0.4989 mL	2.4944 mL	4.9888 mL
10 mM	0.2494 mL	1.2472 mL	2.4944 mL
50 mM	0.0499 mL	0.2494 mL	0.4989 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

Patnaik A, et al. Discovery of a novel indole pharmacophore for the irreversible inhibition of myeloperoxidase (MPO). Bioorg Med Chem. 2020;28(12):115548.