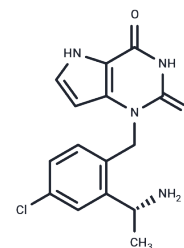


Mitiperstat

Chemical Properties

CAS No. :	1933460-19-5
Formula:	C ₁₅ H ₁₅ ClN ₄ O ₂ S
Molecular Weight:	334.82
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	Mitiperstat is a potent myeloperoxidase (MPO) inhibitor that is effective in preventing cardiovascular diseases such as heart failure and coronary artery disease.
Targets(IC50)	Glutathione Peroxidase,Cytochromes P450
In vivo	AZD4831 (5 mg) inhibits extracellular myeloperoxidase, decreases inflammation, and improves microvascular function in preclinical disease models.[2]

Solubility Information

Solubility	DMSO: 135 mg/mL (403.2 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: 1 mg/mL (2.99 mM),Sonication is recommended. <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	2.9867 mL	14.9334 mL	29.8668 mL
5 mM	0.5973 mL	2.9867 mL	5.9734 mL
10 mM	0.2987 mL	1.4933 mL	2.9867 mL
50 mM	0.0597 mL	0.2987 mL	0.5973 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

Tord Bertil INGHARDT, et al. 1-[2-(AMINOMETHYL)BENZYL]-2-THIOXO-1,2,3,5-TETRAHYDRO-4H-PYRROLO[3,2-d]PYRIMIDIN-4-ONES AS INHIBITORS OF MYELOPEROXIDASE. US20160152623A1.

Lam CSP, et al. Myeloperoxidase Inhibition in Heart Failure With Preserved or Mildly Reduced Ejection Fraction: SATELLITE Trial Results [published online ahead of print, 2023 Apr 16]. J Card Fail. 2023 ; S1071-9164(23)00142-2.

Bhattacharya C, et al. Application of Accelerator Mass Spectrometry to Characterize the Mass Balance Recovery and Disposition of AZD4831, a Novel Myeloperoxidase Inhibitor, following Administration of an Oral Radiolabeled Microtracer Dose in Humans. Drug Metab Dispos. 2023 ; 51(4):451-463.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481