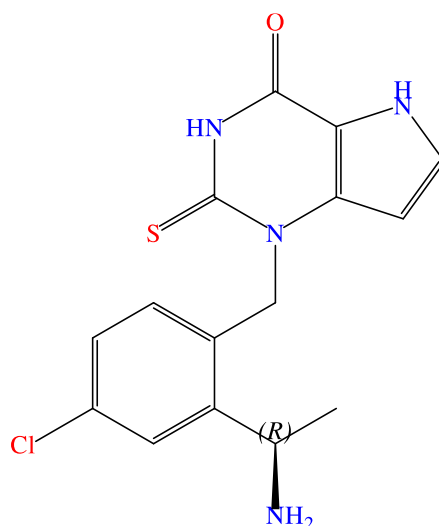


Name: AZD4831 (Mitiperstat) cat#: EX-A7129

Target: Glutathione Peroxidase

Pathway: Metabolic Enzyme/Protease

Chemical Structure:



Chemical Name	1-[[2-[(1R)-1-Aminoethyl]-4-chlorophenyl]methyl]-1,2,3,5-tetrahydro-2-thioxo-4H-pyrrolo[3,2-d]pyrimidin-4-one		
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Molecular Weight	334.824	Storage	3 years -20°C powder
Formula	C15H15ClN4OS		6 months -80°C in solvent Away from light
CAS No.	1933460-19-5	Synonyms	Mitiperstat; AZD4831

Solubility (25°C) *	In vitro	DMSO	Soluble, >100mg/mL (Need ultrasonic)
		Ethanol	N/A
		Water	N/A
	In vivo (should be freshly prepared each time)		

* <1 mg/ml means slightly soluble or insoluble.

* Please note that Selleck tests the solubility of all compounds in-house, and the actual solubility may differ slightly from published values. This is normal and is due to slight

batch-to-batch variations.

Preparing Stock Solutions:

Mass Volume Concentration	1 mg	5 mg	10 mg
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

*The above data is based on the product molecular weight 334.82.

Biological Activities:

Description	Mitiperstat is a potent myeloperoxidase (MPO) inhibitor that is effective in preventing cardiovascular diseases such as heart failure and coronary artery disease.
IC₅₀ & Target	MPO
In Vivo	AZD4831 (5 mg) inhibits extracellular myeloperoxidase, decreases inflammation, and improves microvascular function in preclinical disease models.

References	[1]. 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. Patent US20160152623A1. [2]. Lam, Carolyn S P et al. "Myeloperoxidase Inhibition in Heart Failure With Preserved or Mildly Reduced Ejection Fraction: SATELLITE Trial Results." Journal of cardiac failure vol. 30,1 (2024): 104-110. doi:10.1016/j.cardfail.2023.04.003
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