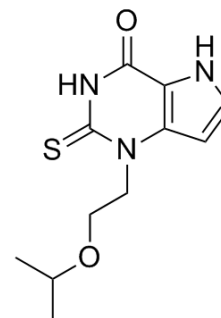


Verdiperstat

Cat. No.:	HY-17646		
CAS No.:	890655-80-8		
Molecular Formula:	C ₁₁ H ₁₅ N ₃ O ₂ S		
Molecular Weight:	253.32		
Target:	Glutathione Peroxidase		
Pathway:	Metabolic Enzyme/Protease		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 150 mg/mL (592.14 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	3.9476 mL	19.7379 mL	39.4758 mL
	5 mM	0.7895 mL	3.9476 mL	7.8952 mL
	10 mM	0.3948 mL	1.9738 mL	3.9476 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

- Add each solvent one by one: **10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline**
Solubility: ≥ 2.5 mg/mL (9.87 mM); Clear solution
- Add each solvent one by one: **10% DMSO >> 90% (20% SBE-β-CD in saline)**
Solubility: ≥ 2.5 mg/mL (9.87 mM); Clear solution
- Add each solvent one by one: **10% DMSO >> 90% corn oil**
Solubility: ≥ 2.5 mg/mL (9.87 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Verdiperstat (AZD3241) is a selective, irreversible and orally active **myeloperoxidase** inhibitor, with an IC₅₀ of 630 nM, and can be used in the research of neurodegenerative brain disorders.

IC₅₀ & Target

IC₅₀: 630 nM (Myeloperoxidase)^[1]

In Vitro

Verdiperstat (AZD3241) is a myeloperoxidase (MPO) inhibitor, with an IC₅₀ of 630 nM, and is used in the research of

neurodegenerative brain disorders^[1]. Verdiperstat (AZD3241) selectively and irreversibly inhibits myeloperoxidase, and may involve reduction of oxidative stress leading to reduction of sustained neuroinflammation^[2].

REFERENCES

[1]. Johnström P, et al. Development of rapid multistep carbon-11 radiosynthesis of the myeloperoxidase inhibitor AZD3241 to assess brain exposure by PET microdosing. Nucl Med Biol. 2015 Jun;42(6):555-60.

[2]. Jucaite A, et al. Effect of the myeloperoxidase inhibitor AZD3241 on microglia: a PET study in Parkinson's disease. Brain. 2015 Sep;138(Pt 9):2687-700.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA