Proteins

Thiabendazole-d₄

Cat. No.: HY-B0263S CAS No.: 1190007-20-5 Molecular Formula: $\mathsf{C}_{10}\mathsf{H}_3\mathsf{D}_4\mathsf{N}_3\mathsf{S}$ Molecular Weight: 205.27

Target: Mitochondrial Metabolism; Parasite Pathway: Metabolic Enzyme/Protease; Anti-infection

Storage: Powder -20°C 3 years In solvent -80°C 6 months

-20°C 1 month

Product Data Sheet

SOLVENT & SOLUBILITY

In Vitro

DMSO: 50 mg/mL (243.58 mM; Need ultrasonic) H2O: 0.1 mg/mL (0.49 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	4.8716 mL	24.3582 mL	48.7163 mL
	5 mM	0.9743 mL	4.8716 mL	9.7433 mL
	10 mM	0.4872 mL	2.4358 mL	4.8716 mL

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

BIOLOGICAL ACTIVITY

Description	Thiabendazole-d ₄ is a deuterated form of Thiabendazole, which is an antiseptic, antifungal and antiparasitic agent[1].
In Vitro	Stable heavy isotopes of hydrogen, carbon, and other elements have been incorporated into drug molecules, largely as tracers for quantitation during the drug development process. Deuteration has gained attention because of its potential to affect the pharmacokinetic and metabolic profiles of drugs ^[75] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. Ann Pharmacother. 2019;53(2):211-223.

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$

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

Page 2 of 2 www.MedChemExpress.com