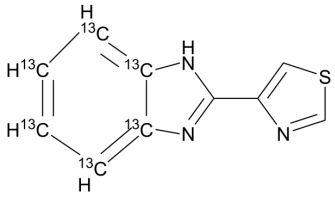
Thiabendazole-$^{13}C_6$

Cat. No.:	HY-B0263S1
CAS No.:	2140327-29-1
Molecular Formula:	$C_4{}^{13}C_6H_7N_3S$
Molecular Weight:	207.2
Target:	Parasite; Mitochondrial Metabolism; Isotope-Labeled Compounds
Pathway:	Anti-infection; Metabolic Enzyme/Protease; Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Thiabendazole-$^{13}C_6$ is the $^{13}C_6$ labeled Thiabendazole. Thiabendazole inhibites the mitochondrial helminth-specific enzyme, fumarate reductase, with anthelminthic property.
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[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Cha, H.J., et al., Evolutionarily repurposed networks reveal the well-known antifungal drug thiabendazole to be a novel vascular disrupting agent. PLoS Biol, 2012. 10(8): p. e1001379.

[2]. Zhang, J., et al., Thiabendazole, a well-known antifungal drug, exhibits anti-metastatic melanoma B16F10 activity via inhibiting VEGF expression and inducing apoptosis. Pharmazie, 2013. 68(12): p. 962-8.

[3]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. Ann Pharmacother. 2019 Feb;53(2):211-216.

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