Product Data Sheet

Triclabendazole sulfoxide-13C,d3

Cat. No.: HY-136450S1

Molecular Formula: $C_{13}^{13}CH_6D_3Cl_3N_2O_2S$

Molecular Weight: 379.67

Target: BCRP; Parasite; Isotope-Labeled Compounds

Pathway: Membrane Transporter/Ion Channel; Anti-infection; Others

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

BIOLOGICAL ACTIVITY

Description	Triclabendazole sulfoxide- 13 C, d $_3$ is the 13 C- and deuterium labeled Triclabendazole sulfoxide. Triclabendazole sulfoxide (TCBZ-SO) is the main plasma metabolite of Triclabendazole, and exhibits anti-parasite effects. Triclabendazole sulfoxide can inhibit membrane transporter ABCG2/BCRP[1][2].
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 ^[53] . 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.

[2]. Barrera B, et, al. The anthelmintic triclabendazole and its metabolites inhibit the membrane transporter ABCG2/BCRP. Antimicrob Agents Chemother. 2012 Jul;56(7):3535-43.

[3]. Robinson MW, et, al. The comparative metabolism of triclabendazole sulphoxide by triclabendazole-susceptible and triclabendazole-resistant Fasciola hepatica. Parasitol Res. 2004 Feb;92(3):205-10.

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

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