Product Data Sheet

β-Zearalanol-d₄

 Cat. No.:
 HY-N6740S

 CAS No.:
 1778735-09-3

 Molecular Formula:
 $C_{18}H_{20}D_4O_5$

Molecular Weight: 324.4

Target: Isotope-Labeled Compounds

Pathway: Others

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

Analysis.

BIOLOGICAL ACTIVITY

Description	$β$ -Zearalanol-d $_4$ is a deuterium labeled Beta-Zearalanol (HY-N6740 $\mathbb{N}^{[1]}$). Beta-Zearalenol is an mycotoxin produced by Fusarium spp, which causes apoptosis and oxidative stress in mammalian reproductive cells [2]. Beta-Zearalenol is the derivative of zearalenone (ZEA) which can conjugate with glucuronic acid [3].
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]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. Ann Pharmacother. 2019 Feb;53(2):211-246.

[2]. Yang F, et al. Melatonin alleviates β-zearalenol and HT-2 toxin-induced apoptosis and oxidative stress in bovine ovarian granulosa cells. Environ Toxicol Pharmacol. 2019 May;68:52-60.

[3]. Marin DE, et al. Cytotoxic and inflammatory effects of individual and combined exposure of HepG2 cells to zearalenone and its metabolites. Naunyn Schmiedebergs Arch Pharmacol. 2019 Aug;392(8):937-947.

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

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