MCE MedChemExpress

p,p'-DDD-d8

Cat. No.: HY-B1984S **CAS No.:** 93952-20-6

Molecular Formula: $C_{14}H_2D_8Cl_4$ Molecular Weight: 328.09

Target: Drug Metabolite

Pathway: Metabolic Enzyme/Protease

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

Analysis.

BIOLOGICAL ACTIVITY

Description	$p,p'-DDD-d_8$ is the deuterium labeled $p,p'-DDD[1]$. $p,p'-DDD$ is a major metabolite of $p,p'-DDT$. $p,p'-DDD$ occurs in the feces and livers of rats, that are given $p,p'-DDT$ by stomach tube, but not of rats injected intraperitoneally with $p,p'-DDT[2][3]$.
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):211-216.

[2]. Mendel JL, et al. Conversion of p,p'-DDT to p,p'-DDD by intestinal flora of the rat. Science. 1966;151(3717):1527-1528.

[3]. Gerić M, et al. Cytogenetic status of human lymphocytes after exposure to low concentrations of p,p'-DDT, and its metabolites (p,p'-DDE, and p,p'-DDD) in vitro. Chemosphere. 201287(11):1288-1294.

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

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