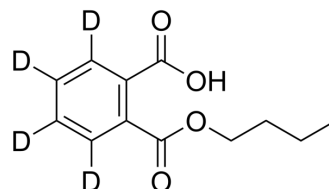


Monobutyl phthalate-d₄

Cat. No.:	HY-N7143S		
CAS No.:	478954-81-3		
Molecular Formula:	C ₁₂ H ₁₀ D ₄ O ₄		
Molecular Weight:	226.26		
Target:	Isotope-Labeled Compounds		
Pathway:	Others		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



BIOLOGICAL ACTIVITY

Description	Monobutyl phthalate-d ₄ is the deuterium labeled Monobutyl phthalate[1]. Monobutyl phthalate, a major metabolite of dibutyl phthalate (DBP), possesses antiandrogenic effects. Monobutyl phthalate is an embryotoxicant[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]. van Dartel DA, et al. Early gene expression changes during embryonic stem cell differentiation into cardiomyocytes and their modulation by monobutyl phthalate. *Reprod Toxicol*. 2009 Apr;27(2):93-102.
- [3]. Ema M, et al. Antiandrogenic effects of dibutyl phthalate and its metabolite, monobutyl phthalate, in rats. *Congenit Anom (Kyoto)*. 2002 Dec;42(4):297-308.

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

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