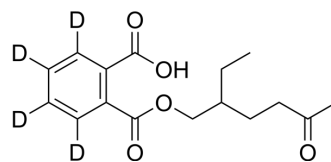


Mono(2-ethyl-5-oxohexyl) phthalate-d₄

Cat. No.:	HY-133676S
CAS No.:	679789-44-7
Molecular Formula:	C ₁₆ H ₁₆ D ₄ O ₅
Molecular Weight:	296.35
Target:	Isotope-Labeled Compounds
Pathway:	Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Mono(2-ethyl-5-oxohexyl) phthalate-d ₄ is a deuterium labeled Mono(2-ethyl-5-oxohexyl) phthalate (HY-133676). Mono(2-ethyl-5-oxohexyl) phthalate is an oxidative metabolite of Di(2-ethylhexyl) phthalate (DEHP). Mono(2-ethyl-5-oxohexyl) phthalate may protective sperm DNA damage. Di(2-ethylhexyl) phthalate is the predominant plasticizer added to rigid polyvinyl chloride (PVC) to impart flexibility, temperature tolerance, optical clarity, strength and resistance to kinking ^{[1][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):211-246.
- [2]. Hauser R. Urinary phthalate metabolites and semen quality: a review of a potential biomarker of susceptibility. *Int J Androl.* 2008;31(2):112-117.
- [3]. Van Vliet ED, et al. A review of alternatives to di (2-ethylhexyl) phthalate-containing medical devices in the neonatal intensive care unit [published correction appears in *J Perinatol.* 2012 Aug;32(8):648]. *J Perinatol.* 2011;31(8):551-560.

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

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