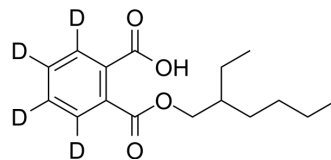


## Mono-(2-ethylhexyl) phthalate-d<sub>4</sub>

Cat. No.:	HY-W018392S
CAS No.:	1276197-22-8
Molecular Formula:	C <sub>16</sub> H <sub>18</sub> D <sub>4</sub> O <sub>4</sub>
Molecular Weight:	282.37
Target:	Isotope-Labeled Compounds
Pathway:	Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	Mono-(2-ethylhexyl) phthalate-d <sub>4</sub> is a deuterium labeled Mono-(2-ethylhexyl) phthalate (HY-W018392). Mono-(2-ethylhexyl) phthalate (MEHP) is a major bioactive metabolite of diethylhexyl phthalate (DEHP). Mono-(2-ethylhexyl) phthalate can promote fatty acid synthesis in hepatocytes by regulating the expression of relevant genes and proteins, contributing to non-alcoholic fatty liver disease (NAFLD) <sup>[1][2]</sup> .
<b>In Vitro</b>	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 <sup>[1]</sup> . 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]. Bai J, et al. Mono-2-ethylhexyl phthalate induces the expression of genes involved in fatty acid synthesis in HepG2 cells. *Environ Toxicol Pharmacol*. 2019 Jul;69:104-111.
- [3]. Tomita I, et al. Fetotoxic effects of mono-2-ethylhexyl phthalate (MEHP) in mice. *Environ Health Perspect*. 1986 Mar;65:249-54.

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

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