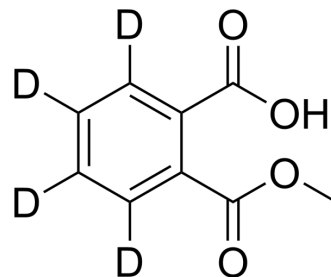


Monomethyl phthalate-d₄

Cat. No.:	HY-Y1097S
CAS No.:	1276197-40-0
Molecular Formula:	C ₉ H ₄ D ₄ O ₄
Molecular Weight:	184.18
Target:	Isotope-Labeled Compounds
Pathway:	Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Monomethyl phthalate-d ₄ (2-(Methoxycarbonyl)benzoic acid-d ₄) is the deuterium labeled Monomethyl phthalate. Monomethyl phthalate is a phthalate metabolite. Monomethyl phthalate acts as a urinary biomarker of phthalates exposure and can be used as a standard for the determination of thyroid cancer and benign nodule ^[1] .
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]. Chong Liu, et al. Urinary biomarkers of phthalates exposure and risks of thyroid cancer and benign nodule. *J Hazard Mater*. 2020 Feb 5;383:121189.

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

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