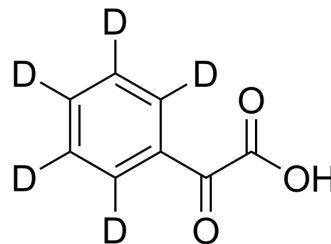


Phenylglyoxylic acid-d₅

Cat. No.:	HY-W010255S
CAS No.:	1217089-53-6
Molecular Formula:	C ₈ HD ₅ O ₃
Molecular Weight:	155.16
Target:	Isotope-Labeled Compounds
Pathway:	Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Phenylglyoxylic acid-d ₅ (Benzoylformic acid-d ₅) is a deuterium labeled Phenylglyoxylic acid (HY-W010255). Phenylglyoxylic acid (Benzoylformic acid) is a metabolite of ethylbenzene and styrene (EB/S) and can be used as a biomarker of exposure to EB/S in human ^{[1][2]} .
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]. Capella KM, et al. Ethylbenzene and styrene exposure in the United States based on urinary mandelic acid and phenylglyoxylic acid: NHANES 2005-2006 and 2011-2012. *Environ Res*. 2019 Apr;171:101-110.

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

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