# Benzoic acid-$^{13}C_6$

**Cat. No.:** HY-N0216S1

**CAS No.:** 125945-98-4

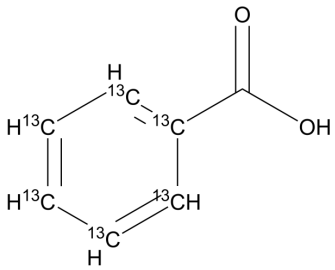
**Molecular Formula:** $C^{13}C_6H_6O_2$

**Molecular Weight:** 128.08

**Target:** Fungal; Bacterial; Endogenous Metabolite

**Pathway:** Anti-infection; Metabolic Enzyme/Protease

**Storage:** 4°C, stored under nitrogen, away from moisture
* In solvent : -80°C, 6 months; -20°C, 1 month (stored under nitrogen, away from moisture)




## SOLVENT & SOLUBILITY

**In Vitro**

DMSO : 125 mg/mL (975.95 mM; Need ultrasonic)
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| Preparing Stock Solutions | Mass / Solvent / Concentration | 1 mg | 5 mg | 10 mg |
|---|---|---|---|---|
| | 1 mM | 7.8076 mL | 39.0381 mL | 78.0762 mL |
| | 5 mM | 1.5615 mL | 7.8076 mL | 15.6152 mL |
| | 10 mM | 0.7808 mL | 3.9038 mL | 7.8076 mL |

Please refer to the solubility information to select the appropriate solvent.

## BIOLOGICAL ACTIVITY

**Description**

Benzoic acid-$^{13}C_6$ is the $^{13}C$-labeled Benzoic acid. Benzoic acid is an aromatic alcohol existing naturally in many plants and is a common additive to food, drinks, cosmetics and other products. It acts as preservatives through inhibiting both bacteria and fungi.

**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;53(2):211-216.

[2]. Nair B, et al. Final report on the safety assessment of Benzyl Alcohol, Benzoic Acid, and Sodium Benzoate. Int J Toxicol. 2001;20 Suppl 3:23-50.



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