N-(Phenylacetyl-d_5)glycine

Cat. No.: HY-W015061S

CAS No.: 1189920-31-7

Molecular Formula: $C_{10}H_6D_5NO_3$

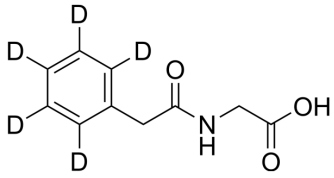
Molecular Weight: 198.23

Target: Endogenous Metabolite; Adrenergic Receptor; Apoptosis

Pathway: Metabolic Enzyme/Protease; GPCR/G Protein; Neuronal Signaling; Apoptosis

Storage:

Powder	-20°C	3 years
	4°C	2 years
In solvent	-80°C	6 months
	-20°C	1 month



BIOLOGICAL ACTIVITY

Description	N-(Phenylacetyl-d_5)glycine is the deuterium labeled Phenylacetylglycine. Phenylacetylglycine is a gut microbial metabolite that can activate β2AR. Phenylacetylglycine protects against cardiac injury caused by ischemia/reperfusion[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]. Xu X, et al. The gut microbial metabolite phenylacetylglycine protects against cardiac injury caused by ischemia/reperfusion through activating β2AR. Arch Biochem Biophys. 2021 Jan 15;697:108720.

[2]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. Ann Pharmacother. 2019;53(2):211-216.

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