



SZABO SCANDIC

Part of Europa Biosite

Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!



Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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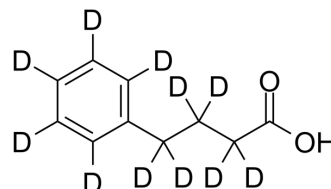
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4-Phenylbutyric acid-d₁₁

Cat. No.:	HY-A0281S
CAS No.:	358730-86-6
Molecular Formula:	C ₁₀ HD ₁₁ O ₂
Molecular Weight:	175.27
Target:	HDAC; Virus Protease
Pathway:	Cell Cycle/DNA Damage; Epigenetics; Anti-infection
Storage:	Powder -20°C 3 years 4°C 2 years In solvent -80°C 6 months -20°C 1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (570.55 mM; Need ultrasonic and warming)

	Solvent Concentration	Mass	1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM		5.7055 mL	28.5274 mL	57.0548 mL
	5 mM		1.1411 mL	5.7055 mL	11.4110 mL
	10 mM		0.5705 mL	2.8527 mL	5.7055 mL

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

BIOLOGICAL ACTIVITY

Description

4-Phenylbutyric acid-d₁₁ is the deuterium labeled 4-Phenylbutyric acid. 4-Phenylbutyric acid (4-PBA) is an inhibitor of HDAC and endoplasmic reticulum (ER) stress, used in cancer and infection research.

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]. Frouco G, et, al. Sodium phenylbutyrate abrogates African swine fever virus replication by disrupting the virus-induced hypoacetylation status of histone H3K9/K14. Virus Res. 2017 Oct 15;242:24-29.

[3]. Park HJ, et al. 4-Phenylbutyric acid protects against lipopolysaccharide-induced bone loss by modulating autophagy in osteoclasts. *Biochem Pharmacol.* 2018 May;151:9-17.

[4]. Chang TH, et al. Enhanced growth inhibition by combination differentiation therapy with ligands of peroxisome proliferator-activated receptor-gamma and inhibitors of histone deacetylase in adenocarcinoma of the lung. *Clin Cancer Res.* 2002 Apr;8(4):1206-12

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

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