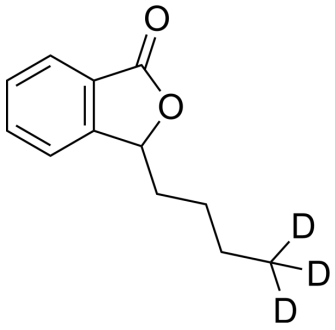
Butylphthalide-d3

Cat. No.:	HY-B0647S1
Molecular Formula:	$C_{12}H_{11}D_3O_2$
Molecular Weight:	193.26
Target:	Isotope-Labeled Compounds
Pathway:	Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Butylphthalide-d_3 is the deuterium labeled Butylphthalide. Butylphthalide(3-n-Butylphthalide), an anti-cerebral-ischemia agent, is first isolated from the seeds of celery and showes efficacy in animal models of stroke.
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]. Cui LY, et al. Ninety-day administration of dl-3-n-butylphthalide for acute ischemic stroke: a randomized, double-blind trial. Chin Med J (Engl). 2013;126(18):3405-10.

[3]. Zhao W, et al. 3-N-butylphthalide improves neuronal morphology after chronic cerebral ischemia. Neural Regen Res. 2014 Apr 1;9(7):719-26.

[4]. Wang X, et al. Design, synthesis and biological evaluation of hydrogen sulfide releasing derivatives of 3-n-butylphthalide as potential antiplatelet and antithrombotic agents. Org Biomol Chem. 2014 Aug 21;12(31):5995-6004.

[5]. Wang F, et al. Improvement of cognitive deficits in SAMP8 mice by 3-n-butylphthalide. Neurol Res. 2014 Mar;36(3):224-33.

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

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