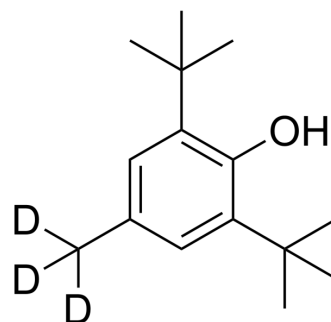


## Butylated hydroxytoluene-d<sub>3</sub>

<b>Cat. No.:</b>	HY-Y0172S2		
<b>CAS No.:</b>	86819-59-2		
<b>Molecular Formula:</b>	C <sub>15</sub> H <sub>21</sub> D <sub>3</sub> O		
<b>Molecular Weight:</b>	223.37		
<b>Target:</b>	Ferroptosis; Endogenous Metabolite		
<b>Pathway:</b>	Apoptosis; Metabolic Enzyme/Protease		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



### BIOLOGICAL ACTIVITY

<b>Description</b>	Butylated hydroxytoluene-d <sub>3</sub> is the deuterium labeled Butylated hydroxytoluene[1]. Butylated hydroxytoluene is an antioxidant widely used in foods and in food-related products[2]. Butylated hydroxytoluene is a Ferroptosis inhibitor[3].
<b>In Vitro</b>	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 <sup>[1]</sup> . 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):211-216.
- [2]. Babich H, et al. Butylated hydroxytoluene (BHT): a review. *Environ Res*. 1982 Oct;29(1):1-29.
- [3]. Umemura T, et al. Butylhydroxytoluene (BHT) increases susceptibility of transgenic rasH2 mice to lung carcinogenesis. *J Cancer Res Clin Oncol*. 2001 Oct;127(10):583-90.
- [4]. Stockwell BR, et al. Ferroptosis: A Regulated Cell Death Nexus Linking Metabolism, Redox Biology, and Disease. *Cell*. 2017 Oct 5;171(2):273-285.

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

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