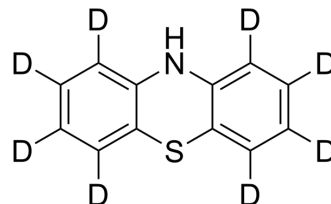


## Phenothiazine-d<sub>8</sub>

<b>Cat. No.:</b>	HY-Y0055S		
<b>CAS No.:</b>	1219803-41-4		
<b>Molecular Formula:</b>	C <sub>12</sub> HD <sub>8</sub> NS		
<b>Molecular Weight:</b>	207.32		
<b>Target:</b>	Fungal; Bacterial; Antibiotic		
<b>Pathway:</b>	Anti-infection		
<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>	Phenothiazine-d <sub>8</sub> is the deuterium labeled Phenothiazine. Phenothiazine is an antibiotic which has insecticidal, fungicidal, antibacterial and anthelmintic activities. Phenothiazine also can be used for the research of neurological diseases[1][2].
<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;53(2):211-216.
- [2]. Mitchell SC, et, al. The toxicity of phenothiazine. *Drug Metabol Drug Interact*. 1994;11(3):201-35.
- [3]. Ohlow MJ, et, al. Phenothiazine: the seven lives of pharmacology's first lead structure. *Drug Discov Today*. 2011 Feb;16(3-4):119-31.
- [4]. Gao YQ, et al. Isolation and Characterization of Antifungal Metabolites from the Melia azedarach-Associated Fungus Diaporthe eucalyptorum. *J Agric Food Chem*. 2020 Feb 26;68(8):2418-2425.

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

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