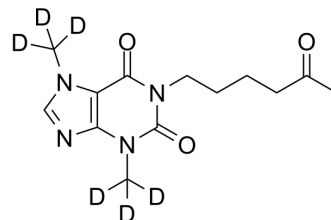


Pentoxifylline-d₆

Cat. No.:	HY-B0715S		
CAS No.:	1185878-98-1		
Molecular Formula:	C ₁₃ H ₁₂ D ₆ N ₄ O ₃		
Molecular Weight:	284.34		
Target:	Phosphodiesterase (PDE); Autophagy; HIV		
Pathway:	Metabolic Enzyme/Protease; Autophagy; 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 : ≥ 10 mg/mL (35.17 mM)
 DMF : ≥ 10 mg/mL (35.17 mM)
 Ethanol : ≥ 2 mg/mL (7.03 mM)
 PBS (pH 7.2) : ≥ 1 mg/mL (3.52 mM)
 * "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent		1 mg	5 mg	10 mg
	Concentration	Mass			
	1 mM		3.5169 mL	17.5846 mL	35.1692 mL
	5 mM		0.7034 mL	3.5169 mL	7.0338 mL
	10 mM		0.3517 mL	1.7585 mL	3.5169 mL

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

BIOLOGICAL ACTIVITY

Description

Pentoxifylline-d₆ is the deuterium labeled Pentoxifylline. Pentoxifylline (BL-191), a haemorheological agent, is an orally active non-selective phosphodiesterase (PDE) inhibitor, with immune modulation, anti-inflammatory, hemorheological, anti-fibrinolytic and anti-proliferation effects. Pentoxifylline can be used for the research of peripheral vascular disease, cerebrovascular disease and a number of other conditions involving a defective regional microcirculation[1][2][3].

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

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- [4]. Yessica Cristina Castellanos-Esparza, et al. Synergistic promoting effects of pentoxifylline and simvastatin on the apoptosis of triple-negative MDA-MB-231 breast cancer cells. *Int J Oncol.* 2018 Apr;52(4):1246-1254.
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Caution: Product has not been fully validated for medical applications. For research use only.

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