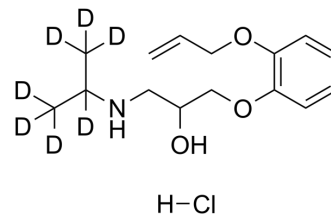


## Oxprenolol-d<sub>7</sub> hydrochloride

<b>Cat. No.:</b>	HY-B1486S		
<b>CAS No.:</b>	1189649-47-5		
<b>Molecular Formula:</b>	C <sub>15</sub> H <sub>17</sub> D <sub>7</sub> ClNO <sub>3</sub>		
<b>Molecular Weight:</b>	308.85		
<b>Target:</b>	Adrenergic Receptor		
<b>Pathway:</b>	GPCR/G Protein; Neuronal Signaling		
<b>Storage:</b>	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 (323.78 mM; Need ultrasonic)

Solvent	Mass	Concentration		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	3.2378 mL	16.1891 mL	32.3782 mL
	5 mM	0.6476 mL	3.2378 mL	6.4756 mL
	10 mM	0.3238 mL	1.6189 mL	3.2378 mL

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

### BIOLOGICAL ACTIVITY

#### Description

Oxprenolol-d<sub>7</sub> (hydrochloride) is the deuterium labeled Oxprenolol hydrochloride. Oxprenolol hydrochloride (Ba 39089) is an orally bioavailable β-adrenergic receptor (β-AR) antagonist with a K<sub>i</sub> of 7.10 nM in a radioligand binding assay using rat heart muscle<sup>[1]</sup>.

#### 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<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]. T Nagatomo, et al. Binding Characteristics of <sup>3</sup>H-dihydroalprenolol to Beta-Adrenoceptors of Rat Heart Treated With Neuraminidase. *Jpn J Pharmacol.* 1983

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Aug;33(4):851-7.

[3]. A S Manning, et al. Abrupt Withdrawal of Chronic Beta-Blockade: Adaptive Changes in Cyclic AMP and Contractility. J Mol Cell Cardiol. 1981 Nov;13(11):999-1009.

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

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