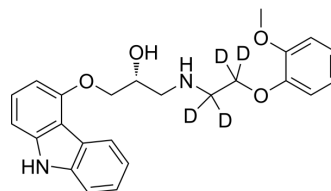


## (R)-Carvedilol-d<sub>4</sub>

<b>Cat. No.:</b>	HY-B0006CS
<b>CAS No.:</b>	2747915-92-8
<b>Molecular Formula:</b>	C <sub>24</sub> H <sub>22</sub> D <sub>4</sub> N <sub>2</sub> O <sub>4</sub>
<b>Molecular Weight:</b>	410.5
<b>Target:</b>	Adrenergic Receptor; Isotope-Labeled Compounds
<b>Pathway:</b>	GPCR/G Protein; Neuronal Signaling; Others
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	(R)-Carvedilol-d <sub>4</sub> is deuterium labeled (R)-Carvedilol. (R)-Carvedilol ((R)-BM 14190), the R-enantiomer of Carvedilol, is a non-selective β/α-1 blocker. (R)-Carvedilol exerts protection against the vascular or cardiac toxicity of Doxorubicin (DOX)[1].
<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]. Wu T, et al. Protective effects of S-carvedilol on doxorubicin-induced damages to human umbilical vein endothelial cells and rats. *J Appl Toxicol*. 2019 Aug;39(8):1233-1244.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA