## **Product** Data Sheet

## Esmolol-d7 hydrochloride

Cat. No.: HY-B1392S CAS No.: 1346598-13-7 Molecular Formula:  $C_{16}H_{19}D_7ClNO_4$ 

Molecular Weight: 338.88

Target: Adrenergic Receptor; Autophagy; Mitophagy

Pathway: GPCR/G Protein; Neuronal Signaling; Autophagy

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

## **BIOLOGICAL ACTIVITY**

| Description | Esmolol-d7 hydrochloride is the deuterium labeled Esmolol hydrochloride. Esmolol hydrochloride is a beta adrenergic receptor blocker $^{[1][2]}$ .   |
|-------------|--|
| 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]. Wiest D. Esmolol. A review of its the rapeutic efficacy and pharmacokinetic characteristics. Clin Pharmacokinet. 1995; 28(3):190-202.

[2]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. Ann Pharmacother. 2019;53(2):211-216.

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