Product Data Sheet

Racecadotril-d₅

Cat. No.: HY-17399S

CAS No.: 1246815-11-1

Molecular Formula: C₂₁H₁₈D₅NO₄S

Molecular Weight: 390.51

Target: Neprilysin; Isotope-Labeled Compounds
Pathway: Metabolic Enzyme/Protease; Others

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

Analysis.

BIOLOGICAL ACTIVITY

Description	Racecadotril- d_5 is the deuterium labeled Racecadotril. Racecadotril (Acetorphan) is a neutral endopeptidase (NEP) inhibitor. Racecadotril and its active metabolite Thiorphan inhibits purified NEP activity from mouse brain with Kis of 4500 and 6.1 nM, respectively. Antidiarrheal agent[1].
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

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

[2]. Marion Eberlin, et al. A comprehensive review of the pharmacodynamics, pharmacokinetics, and clinical effects of the neutral endopeptidase inhibitor Racecadotril. Front Pharmacol. 2012 May 30;3:93.

[3]. David W Griggs, et al. Pharmacologic Comparison of Clinical Neutral Endopeptidase Inhibitors in a Rat Model of Acute Secretory Diarrhea. J Pharmacol Exp Ther. 2016 May;357(2):423-31.

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

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