Inhibitors

Screening Libraries

Ramipril-d5

Cat. No.: HY-B0279S CAS No.: 1132661-86-9 Molecular Formula: $C_{23}H_{27}D_5N_2O_5$

Molecular Weight: 421.54

Target: Angiotensin-converting Enzyme (ACE); Apoptosis

Pathway: Metabolic Enzyme/Protease; Apoptosis

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

Analysis.

BIOLOGICAL ACTIVITY

Description	Ramipril-d5 is the deuterium labeled Ramipril. Ramipril (HOE-498) is an angiotensin-converting enzyme (ACE) inhibitor with IC ₅₀ of 5 nM.
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]. Raasch, W., et al., Combined blockade of AT1-receptors and ACE synergistically potentiates antihypertensive effects in SHR. J Hypertens, 2004. 22(3): p. 611-8.
- [3]. Stevens, B.R., M.I. Phillips, and A. Fernandez, Ramipril inhibition of rabbit (Oryctolagus cuniculus) small intestinal brush border membrane angiotensin converting enzyme. Comp Biochem Physiol C, 1988. 91(2): p. 493-7.
- [4]. Kohlstedt, K., et al., Angiotensin-converting enzyme is involved in outside-in signaling in endothelial cells. Circ Res, 2004. 94(1): p. 60-7.
- [5]. Ceconi, C., et al., Differences in the effect of angiotensin-converting enzyme inhibitors on the rate of endothelial cell apoptosis: in vitro and in vivo studies. Cardiovasc Drugs Ther, 2007. 21(6): p. 423-9.

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