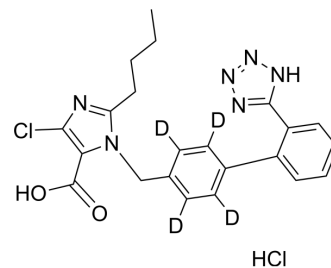


Losartan carboxylic acid-d₄ hydrochloride

Cat. No.:	HY-12765S1
Molecular Formula:	C ₂₂ H ₁₈ D ₄ Cl ₂ N ₆ O ₂
Molecular Weight:	477.38
Target:	Angiotensin Receptor; Isotope-Labeled Compounds
Pathway:	GPCR/G Protein; Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Losartan carboxylic acid-d ₄ (hydrochloride) is deuterium labeled Losartan Carboxylic Acid. Losartan Carboxylic Acid (E-3174), an active carboxylic acid metabolite of Losartan, is an angiotensin II receptor type 1 (AT1) antagonist. The K _i values are 0.97, 0.57, 0.67 nM for rat AT1B/AT1A and human AT1, respectively. Losartan Carboxylic Acid blocks the angiotensin II-induced responses in vascular smooth muscle cells (VSMC). Losartan Carboxylic Acid elevates plasma renin activities and reduces mean arterial pressure[1][2][3][4].
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

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- [2]. Lynch JJ Jr, et al. EXP3174, the AT1 antagonist human metabolite of losartan, but not losartan nor the angiotensin-converting enzyme inhibitor captopril, prevents the development of lethal ischemic ventricular arrhythmias in a canine model of recent myocardial infarction. *J Am Coll Cardiol*. 1999 Sep;34(3):876-84.
- [3]. Richard V, et al. Comparison of the effects of EXP3174, an angiotensin II antagonist and enalaprilat on myocardial infarct size in anaesthetized dogs. *Br J Pharmacol*. 1993 Nov;110(3):969-74.
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Caution: Product has not been fully validated for medical applications. For research use only.

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