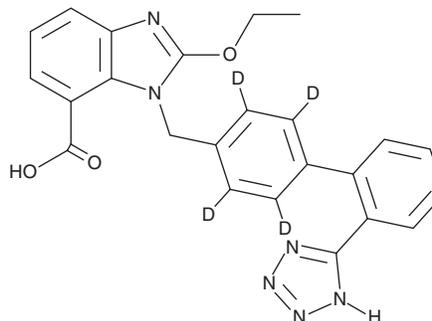


PRODUCT INFORMATION



Candesartan-d₄ Item No. 25419

CAS Registry No.: 1346604-70-3
Formal Name: 2-ethoxy-1-[[2'-(2H-tetrazol-5-yl)[1,1'-biphenyl]-4-yl]-2,3,5,6-d₄]methyl]-1H-benzimidazole-7-carboxylic acid
Synonym: Candesartan M1-d₄
MF: C₂₄H₁₆D₄N₆O₃
FW: 444.5
Chemical Purity: ≥98% (Candesartan)
Deuterium Incorporation: ≥99% deuterated forms (d₁-d₄); ≤1% d₀
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Candesartan-d₄ is intended for use as an internal standard for the quantification of candesartan by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated *versus* unlabeled).

Candesartan-d₄ is supplied as a solid. A stock solution may be made by dissolving the candesartan-d₄ in the solvent of choice, which should be purged with an inert gas. Candesartan-d₄ is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of candesartan-d₄ in ethanol is approximately 3 mg/ml and approximately 30 mg/ml in DMSO and DMF.

Description

Candesartan is an antagonist of the angiotensin II type 1 (AT₁) receptor (K_is = 0.17, 0.12, and 0.12 nM for human AT₁, rat AT_{1A}, and rat AT_{1B} recombinant receptors, respectively) and an active metabolite of the prodrug candesartan cilexetil (Item No. 10489).¹ It is selective for AT₁ over AT₂ receptors (K_i = 26,500 nM for the human recombinant AT₂ receptor). It inhibits angiotensin II-induced contraction of isolated rabbit aortic strips and increases in blood pressure in rats following intravenous administration (ID₅₀ = 0.033 mg/kg).² Formulations containing candesartan have been used in the treatment of hypertension and heart failure.

References

1. Inada, Y., Nakane, T., and Chiba, S. Binding of KRH-594, an antagonist of the angiotensin II type 1 receptor, to cloned human and rat angiotensin II receptors. *Fundam. Clin. Pharmacol.* **16(4)**, 317-323 (2002).
2. Shibouta, Y., Inada, Y., Ojima, M., *et al.* Pharmacological profile of a highly potent and long-acting angiotensin II receptor antagonist, 2-ethoxy-1-[[2'-(1H-tetrazol-5-yl)biphenyl-4-yl]methyl]-1H-benzimidazole-7-carboxylic acid (CV-11974), and its prodrug, (+/-)-1-(cyclohexyloxycarbonyloxy)-ethyl 2-ethoxy-1-[[2'-(1H-tetrazol-5-yl)biphenyl-4-yl]methyl]-1H-benzimidazole-7-carboxylate (TCV-116). *J. Pharmacol. Exp. Ther.* **266(1)**, 114-120 (1993).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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