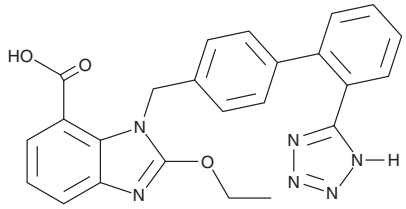
PRODUCT INFORMATION

Candesartan

Item No. 9003239

CAS Registry No.:	139481-59-7
Formal Name:	2-ethoxy-1-[[2′-(2H-tetrazol-5-yl)[1,1′-biphenyl]-4-yl]methyl]-1H-benzimidazole-7-carboxylic acid
Synonyms:	Candesartan M1, CV-11974
MF:	$C_{24}H_{20}N_6O_3$
FW:	440.5
Purity:	≥95%
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 is supplied as a solid. A stock solution may be made by dissolving the candesartan in the solvent of choice, which should be purged with an inert gas. Candesartan is soluble in organic solvents such as DMSO and dimethyl formamide (DMF). The solubility of candesartan in these solvents is approximately 15 and 20 mg/ml, respectively.

Candesartan is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, candesartan should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Candesartan has a solubility of approximately 0.33 mg/ml in a 1:2 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Candesartan is an antagonist of the angiotensin II type 1 (AT_1) receptor (K_is = 0.17, 0.12, and 0.12 nM for recombinant human AT_1, rat AT_{1A}, and rat AT_{1B} receptors, respectively) and an active metabolite of the prodrug candesartan cilexitil (Item No. 10489).[1] It is selective for AT_1 over AT_2 receptors (K_i = 26,500 nM for the recombinant human AT_2 receptor). It inhibits angiotensin II-induced contraction of isolated rabbit aortic strips and increases in blood pressure in rats following intravenous administration (ID_{50} = 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).

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