

Catalog # 10-2049 Candesartan

CAS# 139481-59-7

2-Ethoxy-1-[[2'-(1H-tetrazol-5-yl)[1,1'-biphenyl]-4-yl]methyl]-1H-benzimidazole-7-carboxylic acid CV-11974

Lot # X107324

Angiotensin II receptor I (AT₁) antagonist, IC₅₀s=1.12 and 2.86 nM for bovine adrenal cortex and rabbit aorta respectively. Selectively inhibits angiotensin II-induced contraction of rabbit aortic strips with no effect on contraction induced by other agents such as norepinephrine, KCI, serotonin, PGF_{2 α} or endothelin. Prevents astrocyte and microglial activation and neuroinflammation and improves hippocampal neurogenesis. Attenuates angiogenesis in hepatocellular carcinoma. Clinically useful antihypertensive agent. Ameliorates brain inflammation associated with Alzheimer's disease. Active *in vivo* and orally active.

- 1) Shibouta et al. (1993), 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-benzimidazol-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. Therap., **266** 114
- 2) Bhat et al. (2017), Angiotensin receptor Blockade by Inhibiting Glial Activation Promotes Hippocampal Neurogenesis Via Activation of Wnt/B-Catenin signaling in hypertension; Mol. Neurobiol., **55** 5282
- 3) Fan et al. (2016), Candesartan attenuates angiogenesis in hepatocellular carcinoma via downregulating AT1R/VEGF pathway; Biomed. Pharmacother., 83 704
- 4) Torika et al. (2018), Candesartan ameliorates brain inflammation associated with Alzheimer's disease; CNS Neurosci. Ther. 24 231

PHYSICAL DATA

 $\begin{array}{lll} \mbox{Molecular Weight:} & 440.45 \\ \mbox{Molecular Formula:} & C_{24}\mbox{H}_{20}\mbox{N}_{6}\mbox{O}_{3} \\ \mbox{Purity:} & 98\% \mbox{ by TLC} \end{array}$

NMR: (Conforms)

Solubility: DMSO (up to 40 mg/ml)

Physical Description: White solid

Storage and Stability: Store as supplied desiccated at -20°C for up to 1 year from the date of purchase. Solutions in

DMSO may be stored at -20°C for up to 2 months.

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