



LKT Laboratories, Inc.

Candesartan

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Product Information

Product ID C0253

CAS No. 139481-59-7

Chemical Name 2-ethoxy-3-[[4-[2-(2H-tetrazol-5-yl)phenyl]phenyl]methyl]benzimidazole-4-carboxylic acid

Synonym

Formula C₂₄H₂₀N₆O₃

Formula Wt. 440.45

Melting Point 183-185°C

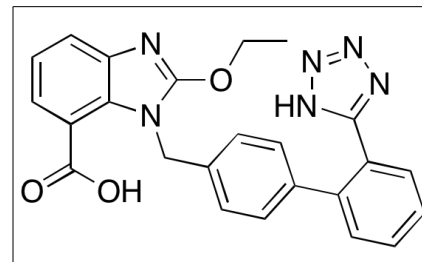
Purity ≥98%

Solubility DMSO 88mg/mL

Store Temp -20°C

Ship Temp Ambient

Description Candesartan is an inhibitor of the angiotensin II type 1 receptor (AT1) that displays antihypertensive, cardioprotective, nephroprotective, and potentially antiviral activities. In vivo, candesartan increases renal blood flow and decreases renal vascular resistance, glomerular filtration rate, and filtration fraction. Candesartan also decreases NADPH oxidase activity and levels of TGF-β, inhibiting calcium oxalate crystal deposition and kidney stone formation. In animal models of pressure overload-induced cardiac remodeling, candesartan downregulates Smad3 and fibronectin, upregulates Smad7, and inhibits matrix metalloproteinase 9 (MMP9) and the epithelial-to-mesenchymal transition (EMT), preventing collagen deposition, left ventricular remodeling, and decreases in left ventricular ejection fraction. Additionally, this compound downregulates expression of VEGFR2, decreasing retinal neovascularization without inhibiting total angiogenesis. Separately, candesartan may inhibit the interaction between lens epithelium-derived growth factor (LEDGF) and HIV-1 integrase, exhibiting potential as a treatment for HIV.



Pricing and Availability

Bulk quantities available upon request

Product ID	Size	List Price
C0253	100 mg	\$126.50
C0253	250 mg	\$225.30
C0253	1 g	\$704.10

References Patinha D, Fasching A, Pinho D, et al. Angiotensin II contributes to glomerular hyperfiltration in diabetic rats independently of adenosine type I receptors. *Am J Physiol Renal Physiol*. 2013 Mar 1;304(5):F614-22. PMID: 23283998.

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Yoshioka I, Tsujihata M, Akanae W, et al. Angiotensin type-1 receptor blocker candesartan inhibits calcium oxalate crystal deposition in ethylene glycol-treated rat kidneys. *Urology*. 2011 Apr;77(4):1007.e9-1007.e14. PMID: 21256551.

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Caution: This product is intended for laboratory and research use only. It is not for human or drug use.