



LKT Laboratories, Inc.

Candesartan Celexetil Ester

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Product Information

Product ID C0254

CAS No. 145040-37-5

Chemical Name

Synonym Candesartan 1-[[[(cyclohexyloxy)carbonyl]oxy]ethyl ester

Formula $C_{33}H_{34}N_6O_6$

Formula Wt. 610.66

Melting Point

Purity $\geq 98\%$

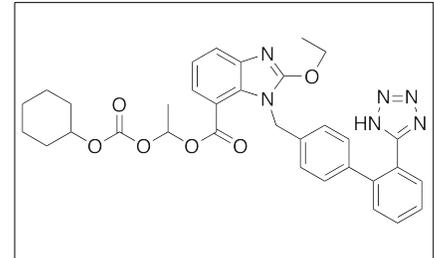
Solubility Chloroform, slightly soluble in methanol, ethanol (3 mg/ml), DMSO (30 mg/ml).

Store Temp Ambient

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.



Bulk quantities available upon request

Product ID	Size
C0254	100 mg
C0254	250 mg
C0254	1 g

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.