



Product Information

Product ID O4549

CAS No. 144689-63-4

Chemical Name (5-methyl-2-oxo-2H-1,3-dioxol-4-yl)methyl 4-(2-hydroxypropan-2-yl)-2-propyl-1-({4-[2-(2H-1,2,3,4-tetrazol-5-yl)phenyl]phenyl}methyl)-1H-imidazole-5-carboxylate

Synonym

Formula C₂₉H₃₀N₆O₆

Formula Wt. 558.59

Melting Point

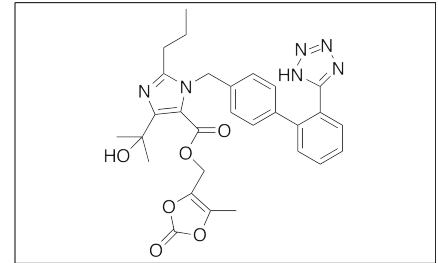
Purity ≥98%

Solubility 0.2mg/ml in ethanol, 20mg/ml in DMSO, and 30 mg/ml in DMF, sparingly soluble in aqueous buffers

Store Temp Ambient

Ship Temp Ambient

Description Olmesartan medoxomil is an angiotensin II type 1 receptor (AT1) inhibitor that inhibits negative regulatory feedback on renin secretion, decreasing secretion of aldosterone and resulting in decreased peripheral vascular resistance (vasodilation). This compound exhibits antihypertensive, cardioprotective, vasodilatory, and anti-inflammatory activities. Due to this action, olmesartan increases cerebral blood flow and cerebrovascular reserve capacity in hypertensive stroke patients. Additionally, this compound improves cardiac function through activation of the DLL4/Notch1 signaling pathway in animal models of chronic cardiac pressure overload. Olmesartan also inhibits activation of apoptosis signal regulating kinase 1 (ASK1) in animal models of diabetes, attenuating cardiac inflammation and vascular endothelial dysfunction.



Bulk quantities available upon request

Product ID	Size
O4549	25 mg
O4549	100 mg
O4549	250 mg

References You J, Wu J, Jiang G, et al. Olmesartan attenuates cardiac remodeling through DLL4/Notch1 pathway activation in pressure overload mice. *J Cardiovasc Pharmacol.* 2013 Feb;61(2):142-51. PMID: 23188126.

Verdecchia P, Angeli F, Repaci S, et al. Comparative assessment of angiotensin receptor blockers in different clinical settings. *Vasc Health Risk Manag.* 2009;5:939-48. PMID: 19997575.

Matsumoto S, Shimodozono M, Miyata R, et al. Benefits of the angiotensin II receptor antagonist olmesartan in controlling hypertension and cerebral hemodynamics after stroke. *Hypertens Res.* 2009 Nov;32(11):1015-21. PMID: 19745828.

Yamamoto E, Dong YF, Kataoka K, et al. Olmesartan prevents cardiovascular injury and hepatic steatosis in obesity and diabetes, accompanied by apoptosis signal regulating kinase-1 inhibition. *Hypertension.* 2008 Sep;52(3):573-80. PMID: 18678790.

Brousil JA, Burke JM. Olmesartan medoxomil: an angiotensin II-receptor blocker. *Clin Ther.* 2003 Apr;25(4):1041-55. PMID: 12809956.

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