



Product Information

Product ID A4534

CAS No. 173334-58-2

Chemical Name (2S,4S,5S,7S)-5-amino-N-(2-carbamoyl-2,2-dimethylethyl)-4-hydroxy-7-[[4-methoxy-3-(3-methoxypropoxy)phenyl]methyl]-8-methyl-2-(propan-2-yl)nonanamide hemifumarate

Synonym

Formula (C₃₀H₅₃N₃O₆)₂ • C₄H₄O₄

Formula Wt. 1219.59

Melting Point

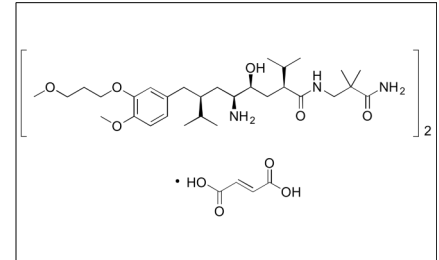
Purity ≥98%

Solubility Soluble in water (≥122 mg/mL), ethanol ≥122 mg/mL, and DMSO (≥122 mg/mL).

Store Temp -20 °C

Ship Temp Ambient

Description Aliskiren is a direct renin inhibitor that exhibits antihypertensive, antithrombotic, and anti-angiogenic activities. Aliskiren binds to the S3bp binding site of renin, inhibiting its ability to cleave angiotensin into angiotensin I, therefore preventing the formation of angiotensin II and resulting contraction of arterial smooth muscle. This compound is a vasodilator, decreasing plasma volume and blood pressure in vivo. In animal models of lupus nephritis, aliskiren attenuated proteinuria by decreasing inflammatory cytokine levels and glomerular inflammation. Additionally, in separate animal studies, aliskiren decreases VEGF levels, improves insulin resistance, and prevents development of venous thrombosis.



Bulk quantities available upon request

Product ID	Size
A4534	25 mg
A4534	100 mg
A4534	250 mg

References Yen TH, Yang HY, Yeh YH, et al. Aliskiren attenuates proteinuria in mice with lupus nephritis by a blood pressure-independent mechanism. *Lupus*. 2013 Feb;22(2):180-9. PMID: 23257405.

Hermanowicz JM, Hermanowicz A, Buczko P, et al. Aliskiren inhibits experimental venous thrombosis in two-kidney one-clip hypertensive rats. *Thromb Res*. 2013 Jan;131(1):e39-44. PMID: 23174623.

Gandhi S, Srinivasan B, Akarte AS. Aliskiren improves insulin resistance and ameliorates diabetic renal vascular complications in STZ-induced diabetic rats. *J Renin Angiotensin Aldosterone Syst*. 2013 Mar;14(1):3-13. PMID: 22791702.

Kühnast S, van der Hoorn JW, van den Hoek AM, et al. Aliskiren inhibits atherosclerosis development and improves plaque stability in APOE*3Leiden.CETP transgenic mice with or without treatment with atorvastatin. *J Hypertens*. 2012 Jan;30(1):107-16. PMID: 22134386.

Buczko W, Hermanowicz JM. Pharmacokinetics and pharmacodynamics of aliskiren, an oral direct renin inhibitor. *Pharmacol Rep*. 2008 Sep-Oct;60(5):623-31. PMID: 19066408.

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