

PRODUCT INFORMATION

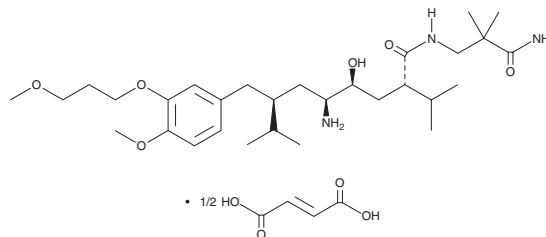


Aliskiren (hemifumarate)

Item No. 19640

CAS Registry No.: 173334-58-2
Formal Name: (αS,γS,δS,ζS)-δ-amino-N-(3-amino-2,2-dimethyl-3-oxopropyl)-γ-hydroxy-4-methoxy-3-(3-methoxypropoxy)-α,ζ-bis(1-methylethyl)-benzeneoctanamide, 2E-butenedioate

Synonyms: CGP 60536, SPP 100
MF: C₃₀H₅₃N₃O₆ • 1/2C₄H₄O₄
FW: 609.8
Purity: ≥95%
UV/Vis.: λ_{max}: 280 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Aliskiren (hemifumarate) is supplied as a crystalline solid. A stock solution may be made by dissolving the aliskiren (hemifumarate) in the solvent of choice. Aliskiren (hemifumarate) is soluble in organic solvents ethanol and DMSO, which should be purged with an inert gas. It is also soluble in water. The solubility of aliskiren (hemifumarate) in ethanol, DMSO, and water is approximately 100 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Aliskiren is a nonpeptide inhibitor of renin (IC₅₀ = 0.6 nM for the human enzyme).¹ Aliskiren (10 and 30 mg/kg per day) reduces blood pressure and prevents albuminuria in renin-overexpressing TG(mRen-2)27 rats in a model of streptozotocin-induced diabetes.² It also reduces cardiac hypertrophy and fibrosis induced by heart pressure overload in mice.³ Formulations containing aliskiren have been used in the treatment of hypertension.

References

1. Rhuel, R., Rasetti, V., Maibaum, J., *et al.* Structure-based drug design: The discovery of novel nonpeptide orally active inhibitors of human renin. *Chem. Biol.* **7(7)**, 493-504 (2000).
2. Feldman, D.L., Jin, L., Xuan, H., *et al.* Effects of aliskiren on blood pressure, albuminuria, and (pro)renin receptor expression in diabetic TG(mRen-2)27 rats. *Hypertension* **52(1)**, 130-136 (2008).
3. Weng, L., Zhang, W., Ye, Y., *et al.* Aliskiren ameliorates pressure overload-induced heart hypertrophy and fibrosis in mice. *Acta Pharmacol. Sin.* **35(8)**, 1005-1014 (2014).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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