

# PRODUCT INFORMATION



## Aliskiren-d<sub>6</sub> (hemifumarate)

Item No. 33291

**Formal Name:** (αS,γS,δS,ζS)-δ-amino-N-(3-amino-2,2-di(methyl-d<sub>3</sub>)-3-oxopropyl)-γ-hydroxy-4-methoxy-3-(3-methoxypropoxy)-α,ζ-bis(1-methylethyl)-benzeneoctanamide, 2E-butenedioate (2:1)

**Synonyms:** CGP 60536-d<sub>6</sub>, SPP 100-d<sub>6</sub>  
**MF:** C<sub>30</sub>H<sub>47</sub>D<sub>6</sub>N<sub>3</sub>O<sub>6</sub> • 1/2C<sub>4</sub>H<sub>4</sub>O<sub>4</sub>  
**FW:** 615.8

**Chemical Purity:** ≥98% (Aliskiren)

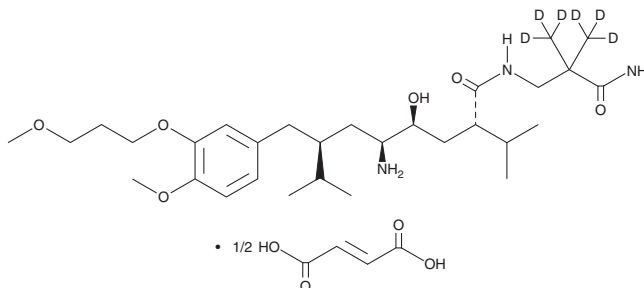
**Deuterium**

**Incorporation:** ≥99% deuterated forms (d<sub>1</sub>-d<sub>6</sub>); ≤1% d<sub>0</sub>

**Supplied as:** A 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-d<sub>6</sub> (hemifumarate) is intended for use as an internal standard for the quantification of aliskiren (Item No. 19640) by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated versus unlabeled).

Aliskiren-d<sub>6</sub> (hemifumarate) is supplied as a solid. A stock solution may be made by dissolving the aliskiren-d<sub>6</sub> (hemifumarate) in the solvent of choice, which should be purged with an inert gas. Aliskiren-d<sub>6</sub> (hemifumarate) is soluble in methanol and DMSO.

### Description

Aliskiren is a nonpeptide inhibitor of renin (IC<sub>50</sub> = 0.6 nM for the human enzyme).<sup>1</sup> 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.<sup>2</sup> It also reduces cardiac hypertrophy and fibrosis induced by heart pressure overload in mice.<sup>3</sup> 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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