

## Product Specification Sheet

**Product Name:** Aliskiren

**Catalog Number:** C2547

### Technical information:

Chemical Formula:  $C_{30}H_{53}N_3O_6$

CAS #: 173334-57-1, 173334-58-2

Molecular Weight: 551.76

Purity: > 98%

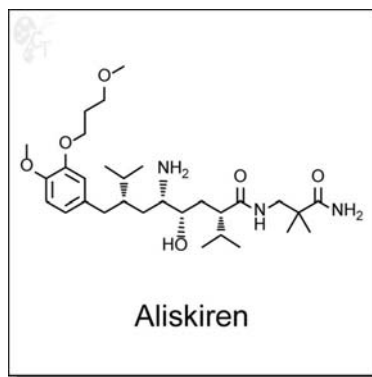
Appearance: White solid

Solubility: Soluble in DMSO up to 22 mM

Chemical Name: (2S,4S,5S,7S)-5-Amino-N-(2-carbamoyl-2-methylpropyl)-4-hydroxy-2-isopropyl-7-[4-methoxy-3-(3-methoxypropoxy)benzyl]-8-methylnonanamide

Storage: Store solid powder at 4°C desiccated; Store DMSO solution at -20°C.

Shelf Life: In the unopened package, powder is stable for 1 year and DMSO solution is stable for 6 months under proper storage condition.



- Handling:**
- To make 10 mM stock solution, add 0.181mL of DMSO for each mg of Aliskiren
  - For DMSO solution, briefly spin the vial at 500 rpm in a 50 mL conical tube to ensure maximum sample recovery.

**Biological Activity:** Aliskiren is an orally-available, nonpeptide piperidine-based inhibitor renin (IC50 0.6 nM) for the treatment of hypertension. [1] Despite its 2.5% bioavailability in humans, the absorbed aliskiren is slowly cleared such that the drug can accumulate to therapeutic levels within several doses.

Aliskiren is highly selective for the Renin-Angiotensin System (RAS) and therefore does not interfere with bradykinin metabolism; therefore side effects often associated with ACE inhibitors are not likely to occur with aliskiren. [2] Aliskiren is effective in reducing blood pressure and is well tolerated, and has shown promising target organ protection in animal models and clinical trials. [3]

- Reference:**
1. Brown, M.J., Aliskiren. *Circulation*, 2008, 118, 773-784. Pubmed ID: 18695203
  2. Allikmets, K., Aliskiren--an orally active renin inhibitor. Review of pharmacology, pharmacodynamics, kinetics, and clinical potential in the treatment of hypertension. *Vasc. Health Risk Mgmt.*, 2007, 3(6), 809-815. Pubmed ID: 18200801
  3. Gradman et al., Aliskiren, a novel orally effective renin inhibitor, provides dose-dependent antihypertensive efficacy and placebo-like tolerability in hypertensive patients. *Circulation* 2005, 111, 1012-1018. Pubmed ID: 15723979

To reorder: <http://www.cellagentech.com/Aliskiren/>

For Technical Support: [technical@cellagentech.com](mailto:technical@cellagentech.com)

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