

## Aliskiren

## Chemical Properties

CAS No. : 173334-57-1

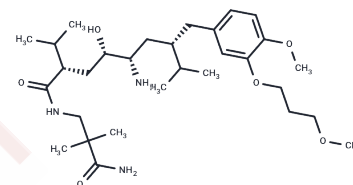
Formula: C<sub>30</sub>H<sub>53</sub>N<sub>3</sub>O<sub>6</sub>

Molecular Weight: 551.76

Store at low temperature

Storage: Pure form: -20°C for 3 years | In solvent: -80°C for 1 year

Actual storage temperature shall be subject to the COA.



## Biological Description

Description	Aliskiren (CGP 60536) is an orally active and potent renin inhibitor (IC <sub>50</sub> : 1.5 nM) with antihypertensive activity for the treatment of various cardiovascular diseases.
Targets(IC <sub>50</sub> )	RAAS, Autophagy
In vitro	In BALB/c mice bearing C26 mouse colon carcinoma cells, a single intragastric administration of Aliskiren at 10 mg/kg significantly alleviates multiple cachexia-associated symptoms, including weight loss, tumor burden, muscle wasting, muscle dysfunction, and shortened survival[3].

## Solubility Information

Solubility	DMSO: 80 mg/mL (144.99 mM), Sonication is recommended. Ethanol: 80 mg/mL (144.99 mM), Sonication is recommended. ( < 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 3.3 mg/mL (5.98 mM), Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

### Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.8124 mL	9.0619 mL	18.1238 mL
5 mM	0.3625 mL	1.8124 mL	3.6248 mL
10 mM	0.1812 mL	0.9062 mL	1.8124 mL
50 mM	0.0362 mL	0.1812 mL	0.3625 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

### Reference

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Wood JM, et al. Structure-based design of aliskiren, a novel orally effective renin inhibitor. Biochem Biophys Res Commun, 2003, 308(4), 698-705.

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

Gradman AH, et al. Aliskiren, a novel orally effective renin inhibitor, provides dose-dependent antihypertensive efficacy and placebo-like tolerability in hypertensive patients. Circulation, 2005, 111(8), 1012-1018.

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