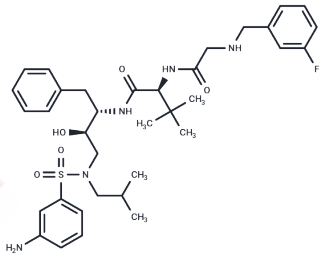
Data Sheet (Cat.No.T15163)

TargetMol

DPC-681

Chemical Properties



CAS No. : 284661-68-3

Formula: C35H48FN5O5S

Molecular Weight: 669.85

Appearance: no data available

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

Biological Description

Description	DPC-681 is a potent and selective HIV protease inhibitor with IC90 values ranging from 4 to 40 nM for wild-type HIV-1.
Targets(IC50)	Others
In vitro	DPC 681 displays no loss in potency toward recombinant mutant HIVs with the D30N mutation and a fivefold or smaller loss in potency toward mutant variants with three to five amino acid substitutions. When all of the HIV-1 strains tested are considered, the average concentrations required for 90% inhibition of replication were 7.3 ± 3.4 for DPC 681.
In vivo	The total body clearance (CL) of DPC 681 in dogs was high (1.8 liters/h/kg) equaling hepatic blood flow for this species (1.8 liters/h/kg). The Cmax increased ninefold between the 10- and 30-mg/kg DPC 681 dose groups. Bioavailability also increased between the 10- and 30-mg/kg dose groups (18.3 and 78.1%, respectively), after oral dosing. These data show that hepatic extraction (first-pass effect) can be saturated in the dog.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.4929 mL	7.4644 mL	14.9287 mL
5 mM	0.2986 mL	1.4929 mL	2.9857 mL
10 mM	0.1493 mL	0.7464 mL	1.4929 mL
50 mM	0.0299 mL	0.1493 mL	0.2986 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.

Reference

Kaltenbach RF 3rd, et al. DPC 681 and DPC 684: potent, selective inhibitors of human immunodeficiency virus protease active against clinically relevant mutant variants. Antimicrob Agents Chemother. 2001 Nov;45(11):3021-8.

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