

FD-IN-1

## Chemical Properties

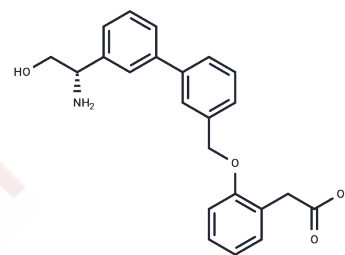
CAS No. : 1646682-14-5

Formula: C<sub>23</sub>H<sub>23</sub>NO<sub>4</sub>

Molecular Weight: 377.43

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

Actual storage temperature shall be subject to the COA.



## Biological Description

Description	FD-IN-1 (Compound 12) is an orally active Factor D (FD) inhibitor (IC <sub>50</sub> =12 nM) that also inhibits Factor XIa (FXIa) and Tryptase β <sub>2</sub> with IC <sub>50</sub> values of 7.7 and 6.5 μM, respectively.
Targets(IC <sub>50</sub> )	Factor Xa, Complement System, Serine/threonin kinase
In vitro	FD-IN-1 (Compound 12) shows activity in the alternative pathway (AP) functional inhibition assay: in an in vitro membrane attack complex (MAC) deposition test using 50% human whole blood (WB), its half-maximal inhibitory concentration (IC <sub>50</sub> ) was found to be 0.26 μM[1].
In vivo	At a dose of 10 mg/kg administered via oral gavage, FD-IN-1 fully inhibited the activity of the alternative pathway (AP) in human factor D knock-in mice, and this inhibitory effect was sustained for up to 10 hours[1].

## Solubility Information

Solubility	DMSO: 48 mg/mL (127.18 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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### Preparing Stock Solutions

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	<b>1mg</b>	<b>5mg</b>	<b>10mg</b>
1 mM	2.6495 mL	13.2475 mL	26.495 mL
5 mM	0.5299 mL	2.6495 mL	5.299 mL
10 mM	0.2649 mL	1.3247 mL	2.6495 mL
50 mM	0.053 mL	0.2649 mL	0.5299 mL

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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

Karki RG, et al. Design, Synthesis, and Preclinical Characterization of Selective Factor D Inhibitors Targeting the Alternative Complement Pathway. J Med Chem. 2019 May 9;62(9):4656-4668.

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