

ZD-0892

## Chemical Properties

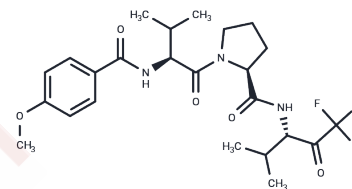
CAS No. : 171964-73-1

Formula: C<sub>24</sub>H<sub>32</sub>F<sub>3</sub>N<sub>3</sub>O<sub>5</sub>

Molecular Weight: 499.52

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	ZD-0892 is a selective and potent inhibitor of neutrophil elastase, targeting human neutrophil elastase and porcine pancreatic elastase with Kis of 6.7 nM and 200 nM, respectively.
Targets(IC50)	Serine Protease
In vitro	Neutrophils incubated with ZD-0892 (20µM) for 1 hour were found to be resistant to superoxide, hypochlorite, hydrogen peroxide, hydroxyl radical and peroxynitrite-mediated degradation and had no effect on the formation of these oxidants by activated neutrophils.[3]
In vivo	Administration of ZD0892 to DBA/2 mice infected with EMC virus reduces myocardial elastolytic activity and coronary microvascular perfusion injury.ZD0892 reduces the pathological severity of myocardial lesions associated with viral myocarditis in mice[1]. ZD-0892 reverses advanced pulmonary vascular disease produced in rats[2].

## Solubility Information

Solubility	DMSO: 150 mg/mL (300.29 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: 4 mg/mL (8.01 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

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	1mg	5mg	10mg
1 mM	2.0019 mL	10.0096 mL	20.0192 mL
5 mM	0.4004 mL	2.0019 mL	4.0038 mL
10 mM	0.2002 mL	1.001 mL	2.0019 mL
50 mM	0.040 mL	0.2002 mL	0.4004 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

- Lee JK, et al. A serine elastase inhibitor reduces inflammation and fibrosis and preserves cardiac function after experimentally-induced murine myocarditis. *Nat Med.* 1998 Dec;4(12):1383-91.
- Cowan KN, et al. Complete reversal of fatal pulmonary hypertension in rats by a serine elastase inhibitor. *Nat Med.* 2000 Jun;6(6):698-702.
- Huang YI, et al. Effect of trifluoromethyl ketone-based elastase inhibitors on neutrophil function in vitro. *J Leukoc Biol.* 1998 Sep;64(3):322-30.

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