

ZYZ-488

## Chemical Properties

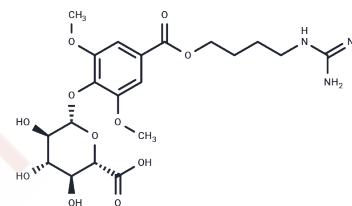
CAS No. : 1470302-79-4

Formula: C<sub>20</sub>H<sub>29</sub>N<sub>3</sub>O<sub>11</sub>

Molecular Weight: 487.46

Storage: Store at low temperature, Keep away from moisture  
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	ZYZ-488 is an Apoptotic Protease-Activating Factor 1 (Apaf-1) inhibitor that inhibits the activation of procaspase-9 and procaspase-3. It can be used to study cardiovascular diseases.
Targets(IC50)	Caspase
In vitro	ZYZ-488 is a novel inhibitor of apoptotic protease activator 1 (Apaf-1). The main mechanism is that ZYZ-488 binds directly to Apaf-1, thus blocking the recruitment of procaspase-9 by Apaf-1. [1]
In vivo	Intramuscular injection of ZYZ-488 (33.9 mg/kg or 67.8 mg/kg) in mice reduced the MI-induced increase in left ventricular volume and reduced the thickness of the ventricular wall. ZYZ-488 preserves cardiac function in a dose-dependent manner. [1] [2]

## Solubility Information

Solubility	H <sub>2</sub> O: 80 mg/mL (164.12 mM), Sonication is recommended. DMSO: 180 mg/mL (369.26 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: 5 mg/mL (10.26 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	2.0515 mL	10.2573 mL	20.5145 mL
5 mM	0.4103 mL	2.0515 mL	4.1029 mL
10 mM	0.2051 mL	1.0257 mL	2.0515 mL
50 mM	0.041 mL	0.2051 mL	0.4103 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

Wang Y, et al. Apoptotic Protease Activating Factor-1 Inhibitor Mitigates Myocardial Ischemia Injury via Disturbing Procaspase-9 Recruitment by Apaf-Oxid Med Cell Longev. 2017;2017:9747296.

Wang Y, et al. The discovery of a novel inhibitor of apoptotic protease activating factor-1 (Apaf-1) for ischemic heart: synthesis, activity and target identification. Sci Rep. 2016 Jul 22;6:29820.

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