

VU534

## Chemical Properties

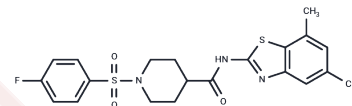
CAS No. : 923509-20-0

Formula: C<sub>21</sub>H<sub>22</sub>FN<sub>3</sub>O<sub>3</sub>S<sub>2</sub>

Molecular Weight: 447.55

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	VU534 is a NAPE-PLD agonist with an EC <sub>50</sub> of 0.30 μM. VU534 is a dual inhibitor of FAAH and sEH, with an IC <sub>50</sub> of 1.2 μM for sEH. VU534 is used in diseases related to cardiometabolism.
Targets(IC <sub>50</sub> )	FAAH, Epoxide Hydrolase, Phospholipase
In vitro	VU534 (30 μM; 24 h) is less cytotoxic to HepG2 and Raw264.7 cell lines.[1] VU534 (3~30 μM; 1 h) can increase NAPE-PLD activity in Raw264.7 cells.[1] VU534 (1 h) can increase NAPE-PLD activity in HepG2 cells with an EC <sub>50</sub> value of 1.5 μM. [1] VU534 (5 μM, 1 h) increased NAPE-PLD activity 1.5-fold but did not reverse NAPE-PLD activity inhibited by LEI-401.[1] VU534 (10 μM; 6 h) significantly enhances efferocytosis of bone marrow-derived macrophages but cannot exert this effect when Napepld is knocked out.[1]

## Solubility Information

Solubility	DMSO: 6.25 mg/mL (13.96 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: 0.63 mg/mL (1.41 mM), Solution. <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	2.2344 mL	11.1719 mL	22.3439 mL
5 mM	0.4469 mL	2.2344 mL	4.4688 mL
10 mM	0.2234 mL	1.1172 mL	2.2344 mL
50 mM	0.0447 mL	0.2234 mL	0.4469 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

Zarrow JE, et al. Small Molecule Activation of NAPE-PLD Enhances Efferocytosis by Macrophages. bioRxiv [Preprint]. 2023 Feb 28:2023.01.25.525554.

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