

DO-264

## Chemical Properties

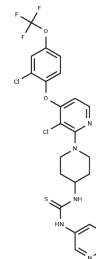
CAS No. : 2301866-59-9

Formula: C<sub>23</sub>H<sub>20</sub>Cl<sub>2</sub>F<sub>3</sub>N<sub>5</sub>O<sub>2</sub>S

Molecular Weight: 558.4

Storage: Store under nitrogen, Store at low temperature  
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	DO-264 is an inhibitor of autohydrolase structural domain 12 (ABHD12) (IC <sub>50</sub> : 11 nM) and an inhibitor of cellular LysoPS degradation that enhances LPS-induced phagocytosis.
Targets(IC <sub>50</sub> )	Others, MAGL
In vitro	DO-264 elevated the lyso-PS and 20:4 PS content of primary human macrophages[1].
In vivo	Mice treated with DO-264 exhibited a dose-dependent increase in brain lyso-PS and 20:4 PS content, which qualitatively resembled changes observed in ABHD12(-/-) mice. Additionally, both ABHD12(-/-) and DO-264-treated mice displayed exacerbated immunopathology following infection with the lymphocytic choriomeningitis virus (LCMV) clone 13, resulting in severe inflammatory lung damage, heightened chemokine production, and, in some cases, death.[1].

## Solubility Information

Solubility	DMSO: 80 mg/mL (143.27 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: 3.3 mg/mL (5.91 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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	<b>1mg</b>	<b>5mg</b>	<b>10mg</b>
1 mM	1.7908 mL	8.9542 mL	17.9083 mL
5 mM	0.3582 mL	1.7908 mL	3.5817 mL
10 mM	0.1791 mL	0.8954 mL	1.7908 mL
50 mM	0.0358 mL	0.1791 mL	0.3582 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

Ogasawara D, et al. Selective blockade of the lyso-PS lipase ABHD12 stimulates immune responses in vivo. Nat Chem Biol. 2018 Dec;14(12):1099-1108.

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