

## JAK-IN-3

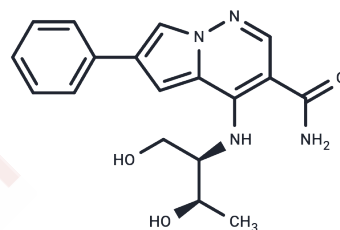
## Chemical Properties

CAS No. : 1400876-94-9

Formula: C<sub>18</sub>H<sub>20</sub>N<sub>4</sub>O<sub>3</sub>

Molecular Weight: 340.38

Storage: Store at low temperature, Keep away from direct sunlight, 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	JAK-IN-3 is a potent JAK inhibitor that inhibits JAK3, JAK1, TYK2, and JAK2, and can be used for the study of immune system disorders.
Targets(IC50)	JAK
In vitro	JAK-IN-3 is a potent JAK inhibitor with IC <sub>50</sub> values of 3 nM, 5 nM, 34 nM, and 70 nM for JAK3, JAK1, TYK2, and JAK2, respectively. [1]

## Solubility Information

Solubility	DMSO: 50 mg/mL (146.89 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: 2.5 mg/mL (7.34 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	2.9379 mL	14.6895 mL	29.3789 mL
5 mM	0.5876 mL	2.9379 mL	5.8758 mL
10 mM	0.2938 mL	1.4689 mL	2.9379 mL
50 mM	0.0588 mL	0.2938 mL	0.5876 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

Spergel SH, et al. Discovery of a JAK1/3 Inhibitor and Use of a Prodrug To Demonstrate Efficacy in a Model of Rheumatoid Arthritis. ACS Med Chem Lett. 2019 Feb 13;10(3):306-311.

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