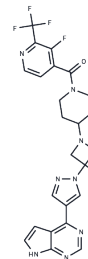


## Itacitinib

## Chemical Properties

CAS No. :	1334298-90-6
Formula:	C <sub>26</sub> H <sub>23</sub> F <sub>4</sub> N <sub>9</sub> O
Molecular Weight:	553.51
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	Itacitinib (INC039110) is an orally bioavailable Janus-associated kinase 1 (JAK1) inhibitor with potential antineoplastic activity.
Targets(IC50)	JAK
In vitro	Itacitinib is an inhibitor of the Janus kinases (JAKs) with selectivity for JAK1.
In vivo	Itacitinib (INC039110) produced significant improvements in sPGA, demonstrating proof of concept in chronic plaque psoriasis.

## Solubility Information

Solubility	DMSO: 150 mg/mL (271 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: < 10 mg/mL (18.07 mM), Lower concentrations may be soluble, but exact solubility limit is unknown. 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 10 mg/mL (18.07 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

	1mg	5mg	10mg
1 mM	1.8067 mL	9.0333 mL	18.0665 mL
5 mM	0.3613 mL	1.8067 mL	3.6133 mL
10 mM	0.1807 mL	0.9033 mL	1.8067 mL
50 mM	0.0361 mL	0.1807 mL	0.3613 mL

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

Bissonnette R, et al. A randomized, double-blind, placebo-controlled, dose-escalation study of the safety and efficacy of INCB039110, an oral janus kinase 1 inhibitor, in patients with stable, chronic plaque psoriasis. *J Dermatolog Treat.* 2016 Aug;27(4):332-8.

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