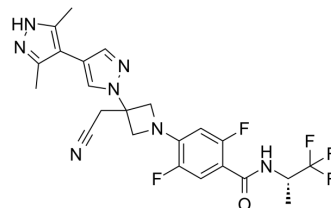


Povorcitinib

Cat. No.:	HY-145588												
CAS No.:	1637677-22-5												
Molecular Formula:	C ₂₃ H ₂₂ F ₅ N ₇ O												
Molecular Weight:	507.46												
Target:	JAK; TNF Receptor												
Pathway:	Epigenetics; JAK/STAT Signaling; Protein Tyrosine Kinase/RTK; Stem Cell/Wnt; Apoptosis												
Storage:	<table border="0"> <tr> <td>Powder</td> <td>-20°C</td> <td>3 years</td> </tr> <tr> <td></td> <td>4°C</td> <td>2 years</td> </tr> <tr> <td>In solvent</td> <td>-80°C</td> <td>6 months</td> </tr> <tr> <td></td> <td>-20°C</td> <td>1 month</td> </tr> </table>	Powder	-20°C	3 years		4°C	2 years	In solvent	-80°C	6 months		-20°C	1 month
Powder	-20°C	3 years											
	4°C	2 years											
In solvent	-80°C	6 months											
	-20°C	1 month											



SOLVENT & SOLUBILITY

In Vitro	DMSO : 250 mg/mL (492.65 mM; Need ultrasonic)				
		Solvent Concentration	Mass		
	Preparing Stock Solutions		1 mg	5 mg	10 mg
		1 mM	1.9706 mL	9.8530 mL	19.7060 mL
		5 mM	0.3941 mL	1.9706 mL	3.9412 mL
10 mM		0.1971 mL	0.9853 mL	1.9706 mL	
Please refer to the solubility information to select the appropriate solvent.					
In Vivo	<ol style="list-style-type: none"> Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.08 mg/mL (4.10 mM); Clear solution Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.08 mg/mL (4.10 mM); Clear solution Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.08 mg/mL (4.10 mM); Clear solution 				

BIOLOGICAL ACTIVITY

Description	Povorcitinib (INCB54707) is a potent and selective JAK1 inhibitor that effectively reduces abscesses and inflammatory nodules. Povorcitinib is used to study cutaneous lupus erythematosus (CLE) and lichen planus (LP) ^{[1][2]} .
IC₅₀ & Target	JAK1 ^[1]
In Vitro	Povorcitinib regulates the expressions of TNF-α and TGF-β, thereby exhibiting anti-inflammatory activity ^[3] .

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

- [1]. Paul Smith, et al. Use of jak1 inhibitors for the treatment of cutaneous lupus erythematosus and lichen planus (lp). Patent WO2021076124A1.
- [2]. Kirby JS, et al. Efficacy and safety of the oral Janus kinase 1 inhibitor povorcitinib (INCB054707) in patients with hidradenitis suppurativa in a phase 2, randomized, double-blind, dose-ranging, placebo-controlled study. *J Am Acad Dermatol.* 2023 Oct 21:S0190-9622(23)03037-2.
- [3]. Zouboulis C C, et al. European S2k guidelines for hidradenitis suppurativa/acne inversa part 2: Treatment[J]. *Journal of the European Academy of Dermatology and Venereology*, 2024.
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Caution: Product has not been fully validated for medical applications. For research use only.

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