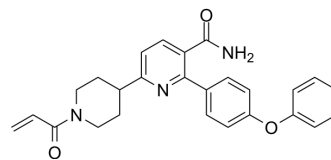


Orelabrutinib

Cat. No.:	HY-129390		
CAS No.:	1655504-04-3		
Molecular Formula:	C ₂₆ H ₂₅ N ₃ O ₃		
Molecular Weight:	427.5		
Target:	Btk		
Pathway:	Protein Tyrosine Kinase/RTK		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	2 years
		-20°C	1 year



SOLVENT & SOLUBILITY

In Vitro	DMSO : 100 mg/mL (233.92 mM; Need ultrasonic)					
		Solvent Concentration	Mass	1 mg	5 mg	10 mg
	Preparing Stock Solutions	1 mM		2.3392 mL	11.6959 mL	23.3918 mL
		5 mM		0.4678 mL	2.3392 mL	4.6784 mL
10 mM			0.2339 mL	1.1696 mL	2.3392 mL	
Please refer to the solubility information to select the appropriate solvent.						
In Vivo	1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (5.85 mM); Clear solution					
	2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (5.85 mM); Clear solution					
	3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (5.85 mM); Clear solution					

BIOLOGICAL ACTIVITY

Description	Orelabrutinib (ICP-022) is a potent, orally active, and irreversible Bruton's tyrosine kinase (BTK) inhibitor with potential antineoplastic activity. Orelabrutinib prevents both the activation of the B-cell antigen receptor (BCR) signaling pathway and BTK-mediated activation of downstream survival pathways, inhibiting the growth of malignant B-cells that overexpress BTK ^{[1][2]} .
In Vitro	With a proprietary formulation, Orelabrutinib (ICP-022) achieves high bioavailability comparing to other BTK inhibitors ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo

Upon administration, Orelabrutinib (ICP-022) binds to and inhibits the activity of BTK. This prevents both the activation of the B-cell antigen receptor (BCR) signaling pathway and BTK-mediated activation of downstream survival pathways, inhibiting the growth of malignant B-cells that overexpress BTK^[2].

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

REFERENCES

[1]. Wei Xu, et al. Safety, Tolerability and Efficacy of Orelabrutinib, Once a Day, to Treat Chinese Patients with Relapsed or Refractory Chronic Lymphocytic Leukemia/Small Cell Leukemia. Blood (2019) 134 (Supplement_1): 4319.

[2]. BTK Inhibitor ICP-022.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA