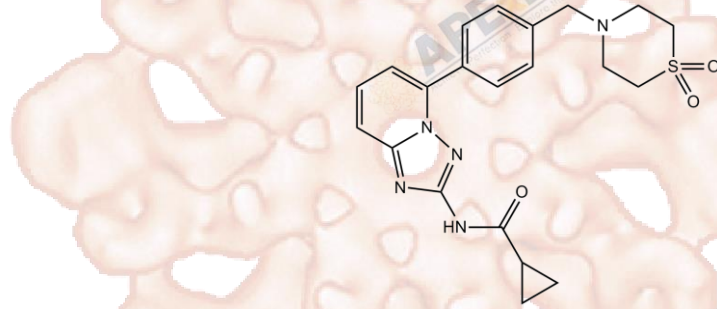


# Product Data Sheet

## GLPG0634

<b>Cat. No.:</b>	B1130
<b>CAS No.:</b>	1206161-97-8
<b>Formula:</b>	C <sub>21</sub> H <sub>23</sub> N <sub>5</sub> O <sub>3</sub> S
<b>M.Wt:</b>	425.5
<b>Synonyms:</b>	
<b>Target:</b>	JAK/STAT Signaling
<b>Pathway:</b>	JAK
<b>Storage:</b>	Store at -20°C



## Solvent & Solubility

≥21.3 mg/mL in DMSO; insoluble in EtOH; insoluble in H<sub>2</sub>O

In Vitro

Preparing Stock Solutions	Solvent	Mass		
		1mg	5mg	10mg
	<b>Concentration</b>			
	<b>1 mM</b>	2.3502 mL	11.7509 mL	23.5018 mL
	<b>5 mM</b>	0.4700 mL	2.3502 mL	4.7004 mL
	<b>10 mM</b>	0.2350 mL	1.1751 mL	2.3502 mL

Please refer to the solubility information to select the appropriate solvent.

## Biological Activity

Shortsummary

JAK1 inhibitor

IC<sub>50</sub> & Target

In Vitro

### Cell Viability Assay

Cell Line:	THP-1 cells (ATCC TIB-202)
Preparation method:	The solubility of this compound in DMSO is >21.3mg/mL. General tips for obtaining a higher concentration: Please warm the tube at 37°C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.
Reacting conditions:	1 μM

	Applications:	In THP-1 cells, GLPG0634 preferentially inhibited JAK signaling complexes containing JAK1 and also inhibited Th1 differentiation with similar potencies of 1 $\mu$ M or lower.
In Vivo	<b>Animal experiment</b>	
	Animal models:	Male Sprague Dawley rats (180–200 g) and CD1 mice (23–25 g)
	Dosage form:	orally dosed as a single esophageal gavage at 5 mg/kg (dosing volume of 5 ml/kg) and i.v. dosed as a bolus via the caudal vein at 1 mg/kg (dosing volume of 5 ml/kg)
	Applications:	GLPG0634 dose-dependently reduced inflammation, cartilage, and bone degradation in the CIA model in rats and mice with significant effect of 3 mg/kg. Protection from bone damage was evidenced by a dose-dependent reduction, with significant effect from GLPG0634 (3 mg/kg), showed a marked reduction of the infiltration of inflammatory cells while protecting the articular cartilage and bone from 1 mg/kg onward.
	Other notes:	Please test the solubility of all compounds indoor, and the actual solubility may slightly differ with the theoretical value. This is caused by an experimental system error and it is normal.

## Product Citations

1. Deng R, Zhang P, et al. "HDAC is indispensable for IFN- $\gamma$ -induced B7-H1 expression in gastric cancer." Clin Epigenetics. 2018 Dec 11;10(1):153.PMID:30537988

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## References

[1]. Van Rompaey L, Galien R, van der Aar E M., et al. Preclinical characterization of GLPG0634, a selective inhibitor of JAK1, for the treatment of inflammatory diseases. The Journal of Immunology, 2013, 191(7): 3568-3577.

## Caution

**FOR RESEARCH PURPOSES ONLY.**

**NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.**

Specific storage and handling information for each product is indicated on the product datasheet. Most APEX BIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Short-term storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.

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**APEx BIO Technology**

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