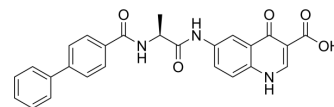


## PTPN22-IN-1

<b>Cat. No.:</b>	HY-139693		
<b>CAS No.:</b>	2580935-57-3		
<b>Molecular Formula:</b>	C <sub>26</sub> H <sub>21</sub> N <sub>3</sub> O <sub>5</sub>		
<b>Molecular Weight:</b>	455.46		
<b>Target:</b>	Phosphatase		
<b>Pathway:</b>	Metabolic Enzyme/Protease		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : 10 mg/mL (21.96 mM; ultrasonic and warming and heat to 60°C)

Concentration	Mass		
	1 mg	5 mg	10 mg
1 mM	2.1956 mL	10.9779 mL	21.9558 mL
5 mM	0.4391 mL	2.1956 mL	4.3912 mL
10 mM	0.2196 mL	1.0978 mL	2.1956 mL

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

### BIOLOGICAL ACTIVITY

#### Description

PTPN22-IN-1 is a potent PTPN22 inhibitor (IC<sub>50</sub>=1.4 μM; K<sub>i</sub>=0.50 μM). PTPN22-IN-1 exhibits >7-10 fold selectivity for PTPN22 over similar phosphatases. PTPN22-IN-1 augments antitumor immune responses<sup>[1]</sup>. From WO2021007491A1 compound L-1.

#### In Vitro

PTPN22-IN-1 (Compound L-1) (WT mice; intraperitoneally) significantly reduces MC38 tumor growth. PTPN22-IN-1 (syngeneic immunocompetent model; CT26 in Balb/c mice) shows similar antitumor effects<sup>[1]</sup>.  
 ?Administration of L-1 intraperitoneally at 10 mg/kg yielded an average AUC of 4.55 μM h and C<sub>max</sub> of 1.1 1 μM (Fig. 9d), which is more than twice of its K<sub>i</sub> value<sup>[1]</sup>.  
 MCE has not independently confirmed the accuracy of these methods. They are for reference only.

#### In Vivo

PTPN22-IN-1 (Compound L-1) (WT mice; intraperitoneally) significantly reduces MC38 tumor growth. PTPN22-IN-1 (syngeneic immunocompetent model; CT26 in Balb/c mice) shows similar antitumor effects<sup>[1]</sup>.  
 ?Administration of L-1 intraperitoneally at 10 mg/kg yielded an average AUC of 4.55 μM h and C<sub>max</sub> of 1.1 1 μM, which is more than twice of its K<sub>i</sub> value<sup>[1]</sup>.  
 MCE has not independently confirmed the accuracy of these methods. They are for reference only.

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## REFERENCES

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[1]. Elizabeth Jaffee, et al. Targeting ptpn22 in cancer therapy. WO2021007491A1.

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**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](mailto:tech@MedChemExpress.com)

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