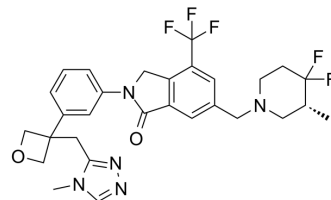


## Cbl-b-IN-2

<b>Cat. No.:</b>	HY-141431		
<b>CAS No.:</b>	2503325-21-9		
<b>Molecular Formula:</b>	C <sub>29</sub> H <sub>30</sub> F <sub>5</sub> N <sub>5</sub> O <sub>2</sub>		
<b>Molecular Weight:</b>	575.57		
<b>Target:</b>	E3 Ligase Ligand-Linker Conjugates		
<b>Pathway:</b>	PROTAC		
<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 : 140 mg/mL (243.24 mM; Need ultrasonic)

Concentration	Solvent	Mass	1 mg			5 mg			10 mg		
			Concentration			Concentration			Concentration		
1 mM			1.7374 mL			8.6870 mL			17.3741 mL		
5 mM			0.3475 mL			1.7374 mL			3.4748 mL		
10 mM			0.1737 mL			0.8687 mL			1.7374 mL		

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

#### In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline  
Solubility: ≥ 3.5 mg/mL (6.08 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)  
Solubility: 3.5 mg/mL (6.08 mM); Suspended solution; Need ultrasonic
- Add each solvent one by one: 10% DMSO >> 90% corn oil  
Solubility: ≥ 3.5 mg/mL (6.08 mM); Clear solution

### BIOLOGICAL ACTIVITY

#### Description

Cbl-b-IN-2 (Example 8) is an orally bioavailable compound, can inhibit the E3 enzyme Casitas B-lineage lymphoma proto-oncogene-b (Cbl-b) in the ubiquitin proteasome pathway. Cbl-b-IN-2 can be used to modulate the immune system and diseases amenable to immune system modulation. Cbl-b-IN-2 (Example 8) also may be administered to an individual with cancer, either alone or as part of a combination, with one or more of an immune checkpoint inhibitor, an anti-neoplastic agent, and radiation agent<sup>[1]</sup>.

#### In Vitro

Cbl-b-IN-2 (Example 8) is a Cbl-b inhibitor with IC<sub>50</sub> values range of 5.1-100 nM and 1 nM in high and low concentration of

Cbl-b, respectively<sup>[1]</sup>.

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

Cell Viability Assay<sup>[1]</sup>

Cell Line:	Immune cell
Concentration:	0.125 nM, 0.15 nM
Incubation Time:	1 h
Result:	Showed Cbl-b activity with an with IC <sub>50</sub> values range of 5.1-100 nM and 1 nM in high and low concentration of Cbl-b, respectively.

## REFERENCES

[1]. Arthur T. Sands, et al. 3-substituted piperidine compounds for cbl-b inhibition, and use of a cbl-b inhibitor in combination with a cancer vaccine and/or oncolytic virus. Patent WO 2020210508A1.

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

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