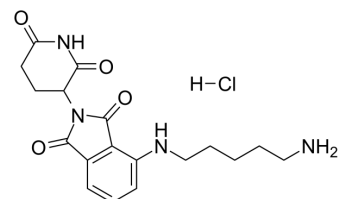


## Thalidomide-NH-C5-NH2 hydrochloride

<b>Cat. No.:</b>	HY-136237
<b>CAS No.:</b>	2375194-03-7
<b>Molecular Formula:</b>	C <sub>18</sub> H <sub>23</sub> ClN <sub>4</sub> O <sub>4</sub>
<b>Molecular Weight:</b>	394.85
<b>Target:</b>	E3 Ligase Ligand-Linker Conjugates
<b>Pathway:</b>	PROTAC
<b>Storage:</b>	-20°C, sealed storage, away from moisture and light * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light)



### SOLVENT & SOLUBILITY

<b>In Vitro</b>	DMSO : 250 mg/mL (633.15 mM; Need ultrasonic)																					
	<table border="1"> <thead> <tr> <th rowspan="2">Solvent</th> <th rowspan="2">Mass</th> <th colspan="3">Concentration</th> </tr> <tr> <th>1 mg</th> <th>5 mg</th> <th>10 mg</th> </tr> </thead> <tbody> <tr> <td rowspan="3">Preparing Stock Solutions</td> <td>1 mM</td> <td>2.5326 mL</td> <td>12.6630 mL</td> <td>25.3261 mL</td> </tr> <tr> <td>5 mM</td> <td>0.5065 mL</td> <td>2.5326 mL</td> <td>5.0652 mL</td> </tr> <tr> <td>10 mM</td> <td>0.2533 mL</td> <td>1.2663 mL</td> <td>2.5326 mL</td> </tr> </tbody> </table>	Solvent	Mass	Concentration			1 mg	5 mg	10 mg	Preparing Stock Solutions	1 mM	2.5326 mL	12.6630 mL	25.3261 mL	5 mM	0.5065 mL	2.5326 mL	5.0652 mL	10 mM	0.2533 mL	1.2663 mL	2.5326 mL
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	Please refer to the solubility information to select the appropriate solvent.																					
<b>In Vivo</b>	<ol style="list-style-type: none"> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 40% PEG300 &gt;&gt; 5% Tween-80 &gt;&gt; 45% saline Solubility: ≥ 2.08 mg/mL (5.27 mM); Clear solution</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.08 mg/mL (5.27 mM); Clear solution</li> </ol>																					

### BIOLOGICAL ACTIVITY

<b>Description</b>	Thalidomide-NH-C5-NH2 hydrochloride is a synthesized E3 ligase ligand-linker conjugate that incorporates the Thalidomide based cereblon ligand and a linker used in PROTAC technology <sup>[1]</sup> .
<b>IC<sub>50</sub> &amp; Target</b>	VHL
<b>In Vitro</b>	PROTACs contain two different ligands connected by a linker; one is a ligand for an E3 ubiquitin ligase and the other is for the target protein. PROTACs exploit the intracellular ubiquitin-proteasome system to selectively degrade target proteins <sup>[2]</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]. Sato T, et al. Cereblon-Based Small-Molecule Compounds to Control Neural Stem Cell Proliferation in Regenerative Medicine. *Front Cell Dev Biol.* 2021;9:629326. Published 2021 Mar 11.
- [2]. Nalawansa DA, et al. PROTACs: An Emerging Therapeutic Modality in Precision Medicine. *Cell Chem Biol.* 2020;27(8):998-985.
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**Caution: Product has not been fully validated for medical applications. For research use only.**

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