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**Product Data Sheet**

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Product Name: Thalidomide-Piperazine-Piperidine hydrochloride

Cat. No.: GC64640

**Chemical Properties**

Cas. No. 2599846-44-1

Formula C<sub>22</sub>H<sub>28</sub>ClN<sub>5</sub>O<sub>4</sub>

M.Wt 461.94

Solubility Water : 33.33 mg/mL (72.15 mM; Need ultrasonic)|DMSO : 4°C,  
3.6 mg/mL (7.79 mM; ultrasonic and warming and heat to 60°C) Storage away  
from  
moisture

General tips For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

Structure **Background**

Thalidomide-Piperazine-Piperidine hydrochloride is a synthesized E3 ligase ligand-linker conjugate. Thalidomide-Piperazine-Piperidine hydrochloride incorporates the Thalidomide based cereblon ligand and a linker used in PROTAC technology[1].

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[1].

[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.

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

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