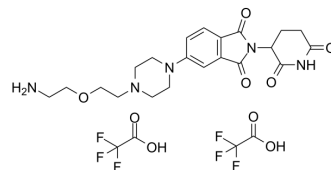


Thalidomide-Piperazine-PEG1-NH2 diTFA

| | |
|---------------------------|--|
| Cat. No.: | HY-138789A |
| Molecular Formula: | C ₂₅ H ₂₉ F ₆ N ₅ O ₉ |
| Molecular Weight: | 657.52 |
| Target: | E3 Ligase Ligand-Linker Conjugates |
| Pathway: | PROTAC |
| Storage: | 4°C, sealed storage, away from moisture * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture) |



SOLVENT & SOLUBILITY

| | | | | | |
|---|--|----------------------|-------------|-------------|--------------|
| In Vitro | DMSO : 100 mg/mL (152.09 mM; Need ultrasonic) | | | | |
| | | Solvent | Mass | | |
| | Preparing Stock Solutions | Concentration | 1 mg | 5 mg | 10 mg |
| | | 1 mM | 1.5209 mL | 7.6043 mL | 15.2087 mL |
| | | 5 mM | 0.3042 mL | 1.5209 mL | 3.0417 mL |
| 10 mM | | 0.1521 mL | 0.7604 mL | 1.5209 mL | |
| Please refer to the solubility information to select the appropriate solvent. | | | | | |
| In Vivo | 1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: 2.5 mg/mL (3.80 mM); Suspended solution; Need ultrasonic 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (3.80 mM); Clear solution | | | | |

BIOLOGICAL ACTIVITY

| | |
|-------------------------------------|--|
| Description | Thalidomide-Piperazine-PEG1-NH2 diTFA is a synthesized E3 ligase ligand-linker conjugate that incorporates the Thalidomide based cereblon ligand and a linker used in PROTAC technology ^[1] . |
| IC₅₀ & Target | Cereblon |
| In Vitro | 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 ^[2] . MCE has not independently confirmed the accuracy of these methods. They are for reference only. |

REFERENCES

[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]. Nalawansha DA, et al. PROTACs: An Emerging Therapeutic Modality in Precision Medicine. *Cell Chem Biol.* 2020;27(8):998-1000.

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

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