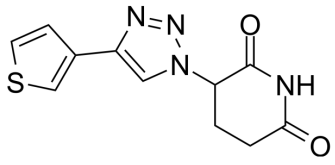
TMX-4100

Cat. No.:	HY-145321
CAS No.:	2367619-63-2
Molecular Formula:	$C_{11}H_{10}N_4O_2S$
Molecular Weight:	262.29
Target:	Phosphodiesterase (PDE); Molecular Glues
Pathway:	Metabolic Enzyme/Protease; PROTAC
Storage:	Powder -20°C 3 years 4°C 2 years In solvent -80°C 6 months -20°C 1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (381.26 mM; ultrasonic and warming and heat to 60°C)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	3.8126 mL	19.0629 mL	38.1257 mL
	5 mM	0.7625 mL	3.8126 mL	7.6251 mL
	10 mM	0.3813 mL	1.9063 mL	3.8126 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: ≥ 0.71 mg/mL (2.71 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 0.71 mg/mL (2.71 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

TMX-4100 is a selective phosphodiesterase 6D (PDE6D) degrader. TMX-4100 shows a high degradation preference for PDE6D with the DC_{50} values less than 200 nM in MOLT4, Jurkat, and MM.1S cells. TMX-4100 can be used for the research of multiple myeloma[1].

IC_{50} & Target	PDE6	PDE6D

In Vitro

TMX-4100 (compound 3; 1 μM; 4 h) shows a high degradation preference for PDE6D in MOLT4 cells[1].
TMX-4100 has better proteome-wide degradation selectivity in MOLT4 cells, compare to PDE6D degrader FPFT-2216[1].
TMX-4100 does not impede the growth of KRAS-dependent cell lines (MIA PaCa-2, NCI-H358, AGS, PA-TU-8988T cells)[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Western Blot Analysis[1]	
Cell Line:	MOLT4 cells
Concentration:	1 μM
Incubation Time:	4 hours
Result:	Showed a high degradation preference for PDE6D.

Western Blot Analysis[1]	
Cell Line:	MOLT4, Jurkat, and MM.1S cells
Concentration:	0 nM, 40 nM, 200 nM, 1 μM;
Incubation Time:	4 hours
Result:	Showed a high degradation preference for PDE6D with the DC_{50} value less than 200 nM.

REFERENCES

[1]. Teng M, et al. Development of PDE6D and CK1α Degraders through Chemical Derivatization of FPFT-2216. J Med Chem. 2022 Jan 13;65(1):747-756.

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