TMX-4113

Cat. No.: HY-145320

CAS No.: 2766385-92-4

Molecular Formula: $C_{12}H_{12}N_4O_2S_2$

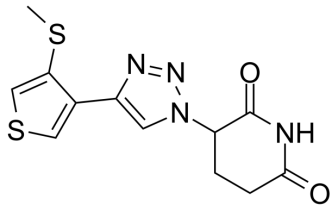
Molecular Weight: 308.38

Target: Phosphodiesterase (PDE); Casein Kinase; Molecular Glues

Pathway: Metabolic Enzyme/Protease; Cell Cycle/DNA Damage; Stem Cell/Wnt; 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 (324.28 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	3.2428 mL	16.2138 mL	32.4275 mL
	5 mM	0.6486 mL	3.2428 mL	6.4855 mL
	10 mM	0.3243 mL	1.6214 mL	3.2428 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 (8.11 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (8.11 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (8.11 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

TMX-4113 is a degrader of phosphodiesterase 6D (PDE6D) and casein kinase 1α (CK1α). TMX-4113 can be used for the research of cancer[1].

IC_{50} & Target		
	PDE6D	CK1α

In Vitro

TMX-4113 (compound 21; 1 μM; 4 h) shows a high degradation preference for PDE6D and CK1α in MOLT4 cells[1].
TMX-4113 (0 nM, 40 nM, 200 nM, 1μM; 4h) induces degradation of PDE6D in MOLT4 cells[1].

TMX-4113 (0 nM, 40 nM, 200 nM, 1μM; 4h) degrades over 50% of CK1α at a dose of 40 nM in MM.1S 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 h
Result:	Showed a high degradation preference for PDE6D and CK1α.

Western Blot Analysis[1]

Cell Line:	MOLT4 cells
Concentration:	0 nM, 40 nM, 200 nM, 1μM
Incubation Time:	4 h
Result:	Induced degradation of PDE6D.

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