dTRIM24

Cat. No.: HY-111519

CAS No.: 2170695-14-2

Molecular Formula: $C_{55}H_{68}N_8O_{13}S_2$

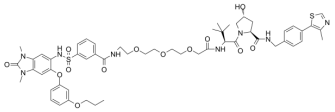
Molecular Weight: 1113.3

Target: PROTACs; Epigenetic Reader Domain

Pathway: PROTAC; Epigenetics

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 (89.82 mM; Need ultrasonic)
Ethanol : < 1 mg/mL (insoluble)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	0.8982 mL	4.4912 mL	8.9823 mL
	5 mM	0.1796 mL	0.8982 mL	1.7965 mL
	10 mM	0.0898 mL	0.4491 mL	0.8982 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 (2.25 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (2.25 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

dTRIM24 is a selective bifunctional degrader of TRIM24 based on PROTAC, consists of ligands for von Hippel-Lindau and TRIM24.

IC_{50} & Target

TRIM24[2].

In Vitro

dTRIM24 is a degrader of TRIM24 bromodomain. Recruitment of the VHL E3 ubiquitin ligase by dTRIM24 elicits potent and selective degradation of TRIM24. The anti-proliferative consequences of chemical degradation versus inhibition of TRIM24 are assessed. Growth over time is determined for MOLM-13 cells treated with dTRIM24, IACS-9571, VL-269, and eTRIM24. dTRIM24 suppresses growth to a greater extent than does IACS-9571, accompanied by apoptosis measured as enhanced

PARP cleavage. In agreement with a sustained proliferative defect observed following dTRIM24 treatment, near-complete degradation of TRIM24 is observed in dTRIM24-treated cells throughout the duration of the experiment[2].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

PROTOCOL

Cell Assay [2]

MOLM-13 cells are seeded at 30,000 cells/well. Growth over time of MOLM-13 cells treated with 5 μM of indicated compounds (e.g., dTRIM24) over 7 d. At endpoints, cells are suspended and mixed with Viacount reagent at 1:3. The mixture is incubated for 5 min, and viable cells are counted on the Guava easycyte flow cytometer. Means from three technical replicates of cell counts are calculated[2].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

CUSTOMER VALIDATION

- Mol Cell. 2021 Apr 1;81(7):1411-1424.e7.
- J Transl Med. 2021 Dec 9;19(1):505.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Gechijian LN, et al. Functional TRIM24 degrader via conjugation of ineffectual bromodomain and VHL ligands. Nat Chem Biol. 2018 Apr;14(4):405-412.

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