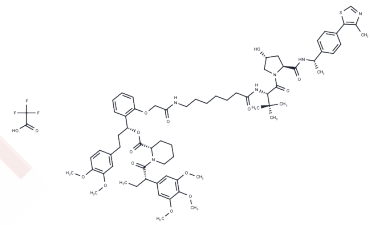
Data Sheet (Cat.No.T40251)

TargetMol

dTAGV-1 TFA

Chemical Properties



CAS No. : 2624313-15-9

Formula: C70H91F3N6O16S

Molecular Weight: 1361.58

Storage: Keep away from moisture,Keep away from direct sunlight
Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	dTAGV-1 TFA is a highly efficient, highly selective VHL-dependent PROTAC-mediated protein degrader that specifically targets and degrades mutant FKBP12 fusion proteins. dTAGV-1 TFA efficiently induces the degradation of FKBP12 fusion proteins at both the cellular and in vivo levels.
Targets(IC50)	mTOR,PROTACs
In vitro	Methods: PATU-8902 FKBP12F^{36}V-KRASG^{12}V cells were treated with dTAGV-1 TFA (500 nM) for 4 hours, and KRASG^{12}V expression levels were detected by Western blot. Results: dTAGV-1 TFA induced KRASG^{12}V degradation (4 hours). [1] Method: 293T WT and 293T VHL$^{-/-}$ cells (both expressing FKBP12F^{36}V-KRASG^{12}V) were treated with dTAGV-1 TFA (500 nM) for 4 hours, and KRASG^{12}V expression levels were detected by Western blot. Results: dTAGV-1 TFA failed to degrade KRASG^{12}V in VHL$^{-/-}$ cells, demonstrating that its action is VHL-dependent.[1]
In vivo	Methods: To investigate the in vivo pharmacokinetics (PK) of dTAGV-1 TFA, female NSG mice (8 weeks old) were selected. After tail vein inoculation with MV4;11 luc-FKBP12F^{36}V cells, the mice received daily intraperitoneal injections of dTAGV-1 TFA (35 mg/kg) for 3 consecutive days, followed by in vivo imaging 4 hours after the final dose. Results: Four hours after the first administration, the bioluminescence signal in the dTAGV-1 group decreased significantly, and the degradation effect persisted 28 hours after the final administration.[1]

Solubility Information

Solubility	DMSO: 80 mg/mL (58.76 mM) (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	0.7344 mL	3.6722 mL	7.3444 mL
5 mM	0.1469 mL	0.7344 mL	1.4689 mL
10 mM	0.0734 mL	0.3672 mL	0.7344 mL
50 mM	0.0147 mL	0.0734 mL	0.1469 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Nabet B, Ferguson FM, Seong BKA, et al. Rapid and direct control of target protein levels with VHL-recruiting dTAG molecules. Nat Commun. 2020;11(1):4687. Published 2020 Sep 18.