

PROTAC-O412

Chemical Properties

CAS No. : 2785323-62-6

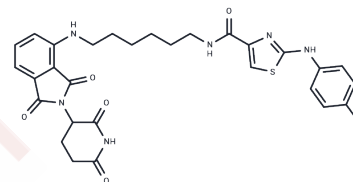
Formula: C₂₉H₂₉ClN₆O₅

Molecular Weight: 609.1

Keep away from direct sunlight

Storage: 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	PROTAC-O412, a PROTAC ligand targeting splicing factor 3B1 (SF3B1), induced FLAG-SF3B1 degradation in K562 cells with an IC ₅₀ value of 0.244 μM. PROTAC-O412 induced apoptosis in K562 WT cells.
Targets(IC ₅₀)	Apoptosis,PROTACs
In vitro	PROTAC-O412 introduces thalidomide into the ubiquitin E3 ligase cereblon (CRBN), thereby selectively degrading SF3B1 and inhibiting tumor growth in cells.[1] PROTAC-O412 degrades and inhibits SF3B1 in K562 cells. PROTAC-O412 has anti-proliferative effects on SF3B1 WT, SF3B1 OE, and SF3B1 K700E cells with IC ₅₀ of 228, 63, and 90 nM, respectively.[1] PROTAC-O412 induces FLAG-SF3B1 degradation in a concentration-dependent manner, with a half-maximal inhibitory concentration (IC ₅₀) value of 0.244 μM in K562 cells.[1]
In vivo	Flies were fed on a round filter paper loaded with PROTAC-O412 (10 μM) in a 5% sucrose solution, maintained at 18°C, and flipped into a freshly prepared vial every 2 days. PROTAC-O412 significantly improves Drosophila survival in a Drosophila intestinal tumor model by interfering with tumor maintenance and proliferation.[1]

Solubility Information

Solubility	DMSO: 200 mg/mL (328.35 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 5 mg/mL (8.21 mM),Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.6418 mL	8.2088 mL	16.4177 mL
5 mM	0.3284 mL	1.6418 mL	3.2835 mL
10 mM	0.1642 mL	0.8209 mL	1.6418 mL
50 mM	0.0328 mL	0.1642 mL	0.3284 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

Rodrigo A Gama-Brambila, et al. A PROTAC targets splicing factor 3BCell Chem Biol. 2021 Nov 18;28(11):1616-1627.e8.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481