

KB02-SLF

Chemical Properties

CAS No. :

Formula: C50H65ClN4O12

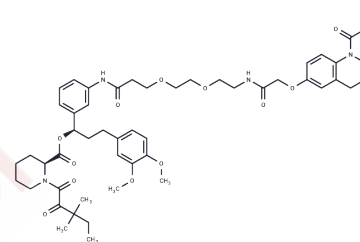
Molecular Weight: 949.52

Storage:

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	KB02-SLF is a PROTAC-based nuclear FKBP12 degrader, also known as a molecular glue, that facilitates the degradation of nuclear FKBP12 by covalently modifying DCAF16, an E3 ligase. SLF acts as a linker, binding to the ubiquitin E3 ligase ligand KB02, thus forming KB02-SLF[1] and enhancing the longevity of protein degradation in biological systems.
Targets(IC50)	FKBP,PROTACs
In vitro	FLAG-tagged variants of FKBP12 (FLAG-FKBP12) or FKBP12 with a C-terminal nuclear localization sequence (FLAG-FKBP12_NLS) in HEK293T cells to provide cell models for evaluating cytosolic-and nuclear-localized E3-mediated degradation pathways, respectively. KB02-SLF promotes a substantial reduction in nuclear FKBP12 that is sustained across a 4-72h time frame. Cell imaging studies confirms the selective loss of nuclear-localized FKBP12 in KB02-SLF-treated cells. KB02-SLF promotes the loss of FKBP12_NLS across a concentration of ~0.5-5µM, but shows varied reductions in activity at higher concentrations. The degradation of FKBP12_NLS induced by KB02-SLF is mediated by DCAF16[1].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.0532 mL	5.2658 mL	10.5316 mL
5 mM	0.2106 mL	1.0532 mL	2.1063 mL
10 mM	0.1053 mL	0.5266 mL	1.0532 mL
50 mM	0.0211 mL	0.1053 mL	0.2106 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

Zhang X, et al. Electrophilic PROTACs that degrade nuclear proteins by engaging DCAF16. Nat Chem Biol. 2019 Jul; 15(7):737-746.

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