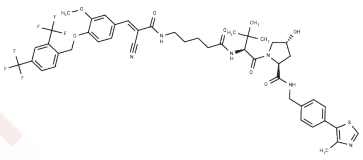
Data Sheet (Cat.No.T39837)

TargetMol

PROTAC ERRα Degrader-3

Chemical Properties



CAS No. : 2306388-65-6

Formula: C47H50F6N6O7S

Molecular Weight: 957.0

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	PROTAC ERRα Degrader-3 is a highly effective and selective von Hippel-Lindau-based ligand that efficiently degrades the ERRα protein, reducing its levels by >80% at a concentration of 30 nM. Notably, this compound shows no activity against the ERRβ and ERRγ proteins.
Targets(IC50)	Estrogen Receptor/ERR,PROTACs
In vitro	PROTAC ERRα Degrader-3 (compound 6c; 0.3 nM-10 μM; 4 hours) effectively induces the degradation of ERRα in a dose-dependent manner, achieving significant degradation with doses as low as 3.0 nM within 4 hours. This compound also significantly reduces the levels of ERRα downstream target genes, such as ATP5B, medium-chain acyl CoA dehydrogenase (MCAD), and pyruvate dehydrogenase kinase 4 (PDK4), in MDA-MB-231 cells following 24 hours of exposure. Furthermore, PROTAC ERRα Degrader-3 disrupts the protein-protein interaction between ERRα and the PGC-1α peptide, marked by an IC50 of 12.67 nM, and induces approximately 96% degradation of the ERRα protein at a concentration of 100 nM after 4 hours. Western Blot analysis in MDA-MB-231 cells across a range of concentrations (0.3 nM to 10 μM) and a 4-hour incubation period corroborates the dose-dependent mechanism of ERRα degradation.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.0449 mL	5.2247 mL	10.4493 mL
5 mM	0.209 mL	1.0449 mL	2.0899 mL
10 mM	0.1045 mL	0.5225 mL	1.0449 mL
50 mM	0.0209 mL	0.1045 mL	0.209 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

Lijie Peng, et al. Identification of New Small-Molecule Inducers of Estrogen-related Receptor α (ERRα) Degradation. ACS Med Chem Lett. 2019 Apr 12;10(5):767-772.