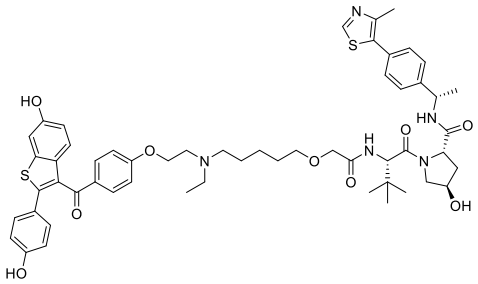
Product data sheet

MedKoo Cat#: 407957 Name: ERD-308 CAS#: 2320561-35-9 Chemical Formula: $C_{55}H_{65}N_5O_9S_2$ Exact Mass: 1003.4224 Molecular Weight: 1004.271	
Product supplied as:	Powder
Purity (by HPLC):	≥ 98%
Shipping conditions	Ambient temperature
Storage conditions:	Powder: -20°C 3 years; 4°C 2 years.
	In solvent: -80°C 3 months; -20°C 2 weeks.

1. Product description:

ERD-308 is a Highly Potent Proteolysis Targeting Chimera (PROTAC) Degrader of Estrogen Receptor (ER) ERD-308 achieves DC50 (concentration causing 50% of protein degradation) values of 0.17 and 0.43 nM in MCF-7 and T47D ER+ breast cancer cell lines, respectively, and induces >95% of ER degradation at concentrations as low as 5 nM in both cell lines. Significantly, ERD-308 induces more complete ER degradation than fulvestrant, the only approved selective ER degrader (SERD), and is more effective in inhibition of cell proliferation than fulvestrant in MCF-7 cells.

2. CoA, QC data, SDS, and handling instruction

SDS and handling instruction, CoA with copies of QC data (NMR, HPLC and MS analytical spectra) can be downloaded from the product web page under "QC And Documents" section. Note: copies of analytical spectra may not be available if the product is being supplied by MedKoo partners. Whether the product was made by MedKoo or provided by its partners, the quality is 100% guaranteed.

3. Solubility data

Solvent	Max Conc. mg/mL	Max Conc. mM
DMSO	50.0	49.79

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	**1 mg**	**5 mg**	**10 mg**
1 mM	1.00 mL	4.98 mL	9.96 mL
5 mM	0.20 mL	1.00 mL	1.99 mL
10 mM	0.10 mL	0.50 mL	1.00 mL
50 mM	0.02 mL	0.10 mL	0.20 mL

5. Molarity Calculator, Reconstitution Calculator, Dilution Calculator

Please refer the product web page under section of "Calculator"

6. Recommended literature which reported protocols for in vitro and in vivo study

In vitro study

1. Hu J, Hu B, Wang M, Xu F, Miao B, Yang CY, Wang M, Liu Z, Hayes DF, Chinnaswamy K, Delproposto J, Stuckey J, Wang S. Discovery of ERD-308 as a Highly Potent Proteolysis Targeting Chimera (PROTAC) Degrader of Estrogen Receptor (ER). J Med Chem. 2019 Feb 14;62(3):1420-1442. doi: 10.1021/acs.jmedchem.8b01572. Epub 2019 Jan 18. PMID: 30990042.

In vivo study

TBD

7. Bioactivity

Biological target:

ERD-308 is a highly potent PROTAC degrader of estrogen receptor (ER) for ER positive breast cancer treatment.

In vitro activity

ERD-308 achieves DC_{50} (concentration causing 50% of protein degradation) values of 0.17 and 0.43 nM in MCF-7 and T47D ER+ breast cancer cell lines, respectively, and induces >95% of ER degradation at concentrations as low as 5 nM in both cell lines.

Product data sheet

Significantly, ERD-308 induces more complete ER degradation than fulvestrant, the only approved selective ER degrader (SERD), and is more effective in inhibition of cell proliferation than fulvestrant in MCF-7 cells.

Reference: J Med Chem. 2019 Feb 14;62(3):1420-1442. https://pubmed.ncbi.nlm.nih.gov/30990042/

In vivo activity

TBD

Note: The information listed here was extracted from literature. MedKoo has not independently retested and confirmed the accuracy of these methods. Customer should use it just for a reference only.