

ERX-41

## Chemical Properties

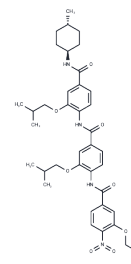
CAS No. : 2440087-54-5

Formula: C38H48N4O9

Molecular Weight: 704.81

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	ERX-41 is an orally active, stereospecific small molecule that targets lysosomal acid lipase A (LIPA). It induces endoplasmic reticulum (ER) stress, leading to cell death independently of its LIPA activity yet reliant on its ER localization, suggesting a role in targeted solid tumor therapies [1].
Targets(IC50)	Others,Lipase
In vitro	ERX-41 (1 $\mu$ M; 0-30 h) induces cell death in MDA-MB-231 cells without significantly affecting normal human mammary epithelial cells (HMECs) [1]. Additionally, ERX-41 (1 $\mu$ M; 2 h, 4 h) causes rapid endoplasmic reticulum expansion and peripheral endoplasmic reticulum disarray within 4 hours and 2 hours, respectively [1]. Moreover, ERX-41 (1 $\mu$ M; 0.5-4 h) activates the unfolded protein response (UPR) pathway by promoting p-PERK and p-eIF2- $\alpha$ [1].
In vivo	ERX-41 (10 mg/kg; oral or intraperitoneal injection; single dose) is detectable within the tumor 1.5 hours post-administration, regardless of the administration route [1]. A single oral dose of ERX-41 at 10 mg/kg significantly inhibits tumor progression in both the MDA-MB-231 and D2A1 xenograft mouse models without affecting mouse body weight [1].

### Preparing Stock Solutions

---

	<b>1mg</b>	<b>5mg</b>	<b>10mg</b>
1 mM	1.4188 mL	7.0941 mL	14.1882 mL
5 mM	0.2838 mL	1.4188 mL	2.8376 mL
10 mM	0.1419 mL	0.7094 mL	1.4188 mL
50 mM	0.0284 mL	0.1419 mL	0.2838 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.

**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