

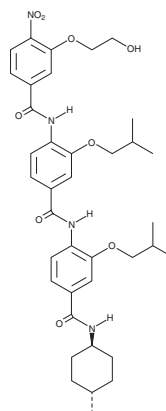
PRODUCT INFORMATION



ERX-41

Item No. 37726

CAS Registry No.: 2440087-54-5
Formal Name: 4-[[3-(2-hydroxyethoxy)-4-nitrobenzoyl]amino]-N-[4-[[[(trans-4-methylcyclohexyl)amino]carbonyl]-2-(2-methylpropoxy)phenyl]-3-(2-methylpropoxy)-benzamide
MF: C₃₈H₄₈N₄O₉
FW: 704.8
Purity: ≥98%
UV/Vis.: λ_{max}: 322 nm
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

ERX-41 is supplied as a solid. A stock solution may be made by dissolving the ERX-41 in the solvent of choice, which should be purged with an inert gas. ERX-41 is soluble in organic solvents such as DMSO and dimethyl formamide (DMF). The solubility of ERX-41 in DMF is approximately 5 mg/ml. ERX-41 is slightly soluble in DMSO.

Description

ERX-41 is an inducer of endoplasmic reticulum (ER) stress.¹ It increases the thermal stability of lysosomal acid lipase when used at a concentration of 10 μM in the cellular thermal shift assay (CETSA) but does not inhibit lysosomal acid lipase enzymatic activity at 30 μM. ERX-41 (1 μM) increases ER tubule width, eukaryotic translation initiation factor 2α kinase 3 (EIF2AK3/PERK) and inositol-requiring enzyme 1α (IRE1α) phosphorylation, and splicing of the gene encoding X-box binding protein 1 (XBP1) in SUM149 triple-negative breast cancer (TNBC) cells. It reduces tumor volume and weight in several patient-derived xenograft (PDX) mouse models of TNBC when administered at a dose of 10 mg/kg.

Reference

1. Liu, X., Viswanadhapalli, S., Kumar, S., *et al.* Targeting LIPA independent of its lipase activity is a therapeutic strategy in solid tumors via induction of endoplasmic reticulum stress. *Nat. Cancer* **3**(7), 866-884 (2022).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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