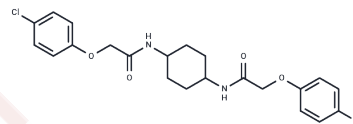


ISRIB

Chemical Properties

CAS No. : 548470-11-7
Formula: C₂₂H₂₄Cl₂N₂O₄
Molecular Weight: 451.34
Appearance: no data available
Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year



Biological Description

Description	ISRIB is a potent and selective PERK inhibitor.
Targets(IC ₅₀)	PERK

Solubility Information

Solubility	DMSO: 4.51 mg/mL (9.99 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
------------	---

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.2156 mL	11.0781 mL	22.1562 mL
5 mM	0.4431 mL	2.2156 mL	4.4312 mL
10 mM	0.2216 mL	1.1078 mL	2.2156 mL
50 mM	0.0443 mL	0.2216 mL	0.4431 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.

Reference

Sidrauski C, et al. Elife. 2013, 2, e00498.

Liu Y, Zou G J, Tu B X, et al. Corticosterone Induced the Increase of proBDNF in Primary Hippocampal Neurons Via Endoplasmic Reticulum Stress. Neurotoxicity Research. 2020

Luhong L, mao Zhou H, han Tang X, et al. PERK inhibitor (ISRIB) improves depression-like behavior by inhibitions of HPA-axis over-activation in mice exposed to chronic restraint stress. Behavioural Brain Research. 2024: 115122.

Liu Y, Zou G J, Tu B X, et al. Corticosterone Induced the Increase of proBDNF in Primary Hippocampal Neurons Via Endoplasmic Reticulum Stress[J]. Neurotoxicity research. 2020.

Zheng M, Zhai Y, Yu Y, et al. TNF compromises intestinal bile-acid tolerance dictating colitis progression and limited infliximab response. Cell Metabolism. 2024

Zhang C, Xu H, Tang Q, et al. CaMKII suppresses proteotoxicity by phosphorylating BAG3 in response to proteasomal dysfunction. EMBO reports. 2024: 1-27.

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: 36 Washington Street, Wellesley Hills, MA 02481