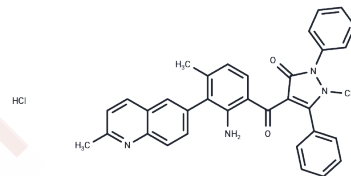


AMG PERK 44

Chemical Properties

CAS No. :	1883548-84-2
Formula:	C ₃₄ H ₂₉ ClN ₄ O ₂
Molecular Weight:	561.07
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	AMG PERK 44 is an orally active and selective PERK inhibitor (IC ₅₀ : 6 nM) that induces autophagy. It also inhibits GCN2 (IC ₅₀ : 7300 nM) and B-Raf (IC ₅₀ >1000 nM), making it useful for cancer research.
Targets(IC ₅₀)	Autophagy,PERK
In vitro	AMG PERK 44 exhibits significant inhibitory activity against pPERK cells in vitro, with an IC ₅₀ of 84 nM[1].
In vivo	In four- to six-week-old naive athymic nude mice, AMG PERK 44 (3, 10, 30, 100 mg/kg; orally) robustly inhibited PERK autophosphorylation[1].

Solubility Information

Solubility	DMSO: 15 mg/mL (26.73 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (3.56 mM),Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.7823 mL	8.9115 mL	17.8231 mL
5 mM	0.3565 mL	1.7823 mL	3.5646 mL
10 mM	0.1782 mL	0.8912 mL	1.7823 mL
50 mM	0.0356 mL	0.1782 mL	0.3565 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

Smith AL, et al. Discovery of 1H-pyrazol-3(2H)-ones as potent and selective inhibitors of protein kinase R-like endoplasmic reticulum kinase (PERK). J Med Chem. 2015 Feb 12;58(3):1426-41.

Roest G, et al. The ER Stress Inducer l-Azetidine-2-Carboxylic Acid Elevates the Levels of Phospho-eIF2 α and of LC3-II in a Ca²⁺-Dependent Manner. Cells. 2018 Nov 30;7(12). pii: E239.

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