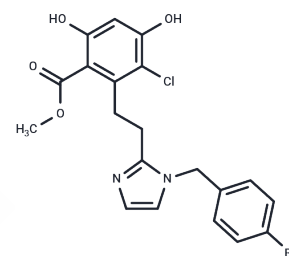


4-Br-Bnlm

Chemical Properties

CAS No. :	1654775-71-9
Formula:	C ₂₀ H ₁₈ BrClN ₂ O ₄
Molecular Weight:	465.72
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	4-Br-Bnlm, with an EC 50 of 0.96 μ M, acts as a selective inhibitor of glucose-regulated protein 94 (Grp94). It effectively reduces both mutant and wild-type misfolded myocilin proteins in cells, thereby enhancing the clearance of toxic forms of myocilin and diminishing myocilin toxicity [1] [2].
Targets(IC50)	Others,HSP
In vitro	4-Br-Bnlm, when applied at concentrations ranging from 0 to 100 μ M for 24 hours, inhibited the expression of 1477N mutant myocilin in human embryonic kidney (HEK) cells [1]. At 30 μ M over 24 hours, it reduced the levels and toxicity of mutant myocilin in primary human trabecular meshwork (HTM) cells [1]. Additionally, 4-Br-Bnlm at concentrations of 3, 10, and 30 μ M for 24 hours inhibited myocilin secretion in a dose-dependent manner [1]. The application of 4-Br-Bnlm at 30 μ M and 100 μ M for 24 hours did not induce a heat shock response in HTM cells [2]. In a cell viability assay with primary human HTM cells, using a concentration of 30 μ M for 24 hours, 4-Br-Bnlm significantly reduced the level of Y437H mutant myocilin without affecting wild-type myocilin and the RFP vector in HEK cells. Western blot analysis with HEK cells across a concentration range of 0, 1, 3, 10, 30, and 100 μ M over 24 hours showed a significant decrease in 1477N mutant myocilin expression without degrading other Hsp90-dependent clients, Akt and Ras.
In vivo	Administering 4-Br-Bnlm at a dosage of 300 μ M via eye drops once daily for 12 weeks effectively cleared mutant myocilin from trabecular meshwork cells and reduced intraocular pressure in Tg-MYOC Y437H mouse models. Additionally, 4-Br-Bnlm improved photopic negative response (PhNR) deficiencies [2]. Animal Model: Tg-MYOC Y437H mice [2].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.1472 mL	10.7361 mL	21.4721 mL
5 mM	0.4294 mL	2.1472 mL	4.2944 mL
10 mM	0.2147 mL	1.0736 mL	2.1472 mL
50 mM	0.0429 mL	0.2147 mL	0.4294 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

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