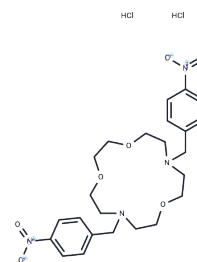


VU590

Chemical Properties

CAS No. :	313505-85-0
Formula:	C ₂₄ H ₃₂ N ₄ O ₇
Molecular Weight:	488.53
Storage:	Keep away from direct sunlight Powder: -20°C for 3 years In solvent: -80°C for 1 year <small>Actual storage temperature shall be subject to the COA.</small>



Biological Description

Description	VU590 is a potent and moderately selective inhibitor of extrarenal medullary potassium ROMK (Kir1.1) that also inhibits Kir7.1 and modulates uterine myometrial contractility and melanocortin signalling.
Targets(IC50)	Potassium Channel

Solubility Information

Solubility	DMSO: < 20 mg/mL, Sonication is recommended. H ₂ O: 1 mg/mL (2.05 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.047 mL	10.2348 mL	20.4696 mL
5 mM	0.4094 mL	2.047 mL	4.0939 mL
10 mM	0.2047 mL	1.0235 mL	2.047 mL
50 mM	0.0409 mL	0.2047 mL	0.4094 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

Kharade SV, et al. Pore Polarity and Charge Determine Differential Block of Kir1.1 and Kir7.1 Potassium Channels by Small-Molecule Inhibitor VU590. *Mol Pharmacol.* 2017 Sep;92(3):338-346.

Bhave G, et al. Development of a selective small-molecule inhibitor of Kir1.1, the renal outer medullary potassium channel. *Mol Pharmacol.* 2011 Jan;79(1):42-50.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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