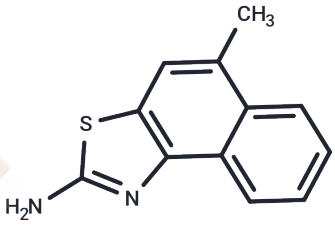
Data Sheet (Cat.No.T24799)

TargetMol

SKA-111

Chemical Properties



CAS No. : 1369170-24-0

Formula: C12H10N2S

Molecular Weight: 214.29

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	SKA-111 is a selective calcium-activated potassium phannel (potassium phannel) KCa3.1 activator that induces membrane hyperpolarization in porcine endothelial cells.SKA-111 binds to the interface between the CaM N-valve and the S4-S5 junction and ameliorates Bradykinin-induced dilation of coronary arteries in the isolated rat heart, which can be used for the study of cardiovascular diseases. study of cardiovascular diseases.
Targets(IC50)	Potassium Channel
In vitro	SKA-111 (1 μM; 5 min) causes KCa3.1 membrane hyperpolarization in porcine endothelial cells. SKA-111 induces significantly enhanced Bradykinin-induced endothelium-derived hyperpolarization (EDH)-type relaxation in porcine large coronary arteries (PCA).[1]
In vivo	SKA-111 (1 μM; Cardiac perfusion; Langendorff in rat hearts;) improves Bradykinin-induced coronary artery dilation in isolated rat hearts. SKA-111 potentiated significantly the fall in coronary perfusion pressure (CPP) induced by 1 nM BK in the presence of the vasoconstrictor in isolated rat hearts.[1]

Solubility Information

Solubility	DMSO: 65 mg/mL (303.33 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 (9.33 mM),Sonication is recommended. *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.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	4.6666 mL	23.3329 mL	46.6657 mL
5 mM	0.9333 mL	4.6666 mL	9.3331 mL
10 mM	0.4667 mL	2.3333 mL	4.6666 mL
50 mM	0.0933 mL	0.4667 mL	0.9333 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

Oliván-Viguera A, et al. Vascular Reactivity Profile of Novel KCa 3.1-Selective Positive-Gating Modulators in the Coronary Vascular Bed. Basic Clin Pharmacol Toxicol. 2016 Aug;119(2):184-92.
Coleman N, et al. New positive Ca2+-activated K+ channel gating modulators with selectivity for KCa3.1. Mol Pharmacol. 2014 Sep;86(3):342-57.