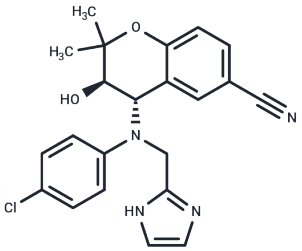
Data Sheet (Cat.No.T10566)

TargetMol

BMS-191095

Chemical Properties



CAS No. : 166095-21-2

Formula: C22H21ClN4O2

Molecular Weight: 408.88

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	BMS-191095 is mitochondrial ATP-sensitive potassium (mitoKATP) channel activator.
Targets(IC50)	Potassium Channel
In vitro	BMS-191095 elicits a dose-dependent vasodilation in endothelium-denuded cerebral arteries with 8.1 ± 2.3%, 31.6 ± 2.1%, and 39.5 ± 3.2% relaxation in response to 10, 50, and 100 μM, respectively. BMS-191095 induces mitochondrial-depolarization and vasodilation.
In vivo	In normal rats, BMS-191095-induced vasodilation was mediated by mitochondrial depolarization and calcium sparks generation in VSM and was reduced by inhibition of BKCa channels.

Solubility Information

Solubility	DMSO: 90 mg/mL (220.11 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Corn Oil: 3.3 mg/mL (8.07 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	2.4457 mL	12.2285 mL	24.4571 mL
5 mM	0.4891 mL	2.4457 mL	4.8914 mL
10 mM	0.2446 mL	1.2229 mL	2.4457 mL
50 mM	0.0489 mL	0.2446 mL	0.4891 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

Katakam PV, et al. Diversity of mitochondria-dependent dilator mechanisms in vascular smooth muscle of cerebral arteries from normal and insulin-resistant rats. Am J Physiol Heart Circ Physiol. 2014 Aug 15;307(4):H493-503.