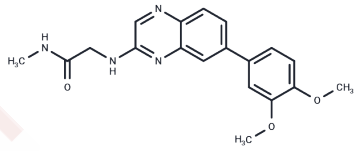
Data Sheet (Cat.No.T4220)

TargetMol

BQR-695

Chemical Properties



CAS No. : 1513879-21-4

Formula: C19H20N4O3

Molecular Weight: 352.39

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	BQR-695 (NVP-BQR695) is a phosphatidylinositol 4-kinase (PI4K) inhibitor with IC50s of 80 and 3.5 nM for human PI4KIIIβ and Plasmodium variant of PI4KIIIβ, respectively.
Targets(IC50)	Parasite,PI3K,PI4K
In vitro	BQR695 demonstrates no toxicity towards mature red blood cells (RBCs), triggers a schizont-stage halt akin to the effects seen in imidazopyrazine-treated parasites, and shows cross-resistance with imidazopyrazine-resistant strains. Administering 0.5 μM of KAI407 or BQR695 leads to the redistribution of GFP-PHOsh2 to the parasite's plasma membrane, indicating a decrease in intracellular PI4P due to the inhibition of PfPI4K activity.

Solubility Information

Solubility	DMSO: 50 mg/mL (141.89 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Corn Oil: 2.5 mg/mL (7.09 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	2.8378 mL	14.1888 mL	28.3776 mL
5 mM	0.5676 mL	2.8378 mL	5.6755 mL
10 mM	0.2838 mL	1.4189 mL	2.8378 mL
50 mM	0.0568 mL	0.2838 mL	0.5676 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

Fowler ML, et al. Using hydrogen deuterium exchange mass spectrometry to engineer optimized constructs for crystallization of protein complexes: Case study of PI4KIIIβ with Rab11. Protein Sci. 2016 Apr;25(4):826-39.
McNamara CW, et al. Targeting Plasmodium PI(4)K to eliminate malaria. Nature. 2013 Dec 12;504(7479):248-253.