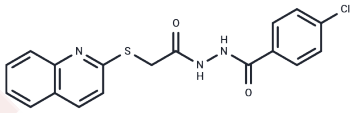
Data Sheet (Cat.No.T8700)

TargetMol

TKIM

Chemical Properties



CAS No. : 326921-25-9

Formula: C18H14ClN3O2S

Molecular Weight: 371.84

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	TKIM is a TWIK-related potassium channel 1 (TREK-1) inhibitor, binding to the pocket of the intermediate (IM) state of TREK-1.
Targets(IC50)	Potassium Channel
In vitro	TKIM binds to the pocket of the IM state of TREK-1, which differs from the binding of common inhibitors, which bind to channels in the inactive state.?Overall, identified an allosteric ligand-binding site and a new mechanistic inhibitor for TREK-1, suggesting that IM states of ion channels may be promising druggable targets for use in discovering allosteric modulators.

Solubility Information

Solubility	DMSO: 30 mg/mL (80.68 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.6893 mL	13.4466 mL	26.8933 mL
5 mM	0.5379 mL	2.6893 mL	5.3787 mL
10 mM	0.2689 mL	1.3447 mL	2.6893 mL
50 mM	0.0538 mL	0.2689 mL	0.5379 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

Ma Y , Luo Q , Fu J , et al. Discovery of an Inhibitor for the TREK-1 Channel Targeting an Intermediate Transition State of Channel Gating[J]. Journal of Medicinal Chemistry, 2020.

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