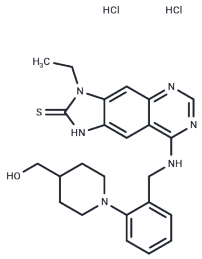
Data Sheet (Cat.No.T9773)

TargetMol

Thioquinapiperifil dihydrochloride

Chemical Properties



CAS No. : 204077-66-7

Formula: C24H29ClN6OS

Molecular Weight: 485.05

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	Thioquinapiperifil dihydrochloride is a phosphodiesterase (PDE-5) inhibitor (IC50: 0.074 nM) that is potent, selective and non-competitive for investigational maturation.
Targets(IC50)	PDE
In vitro	Thioquinapiperifil dihydrochloride (KF31327) (0.1-10 μM) inhibits platelet aggregation in a concentration-dependent manner. In the absence of nitroglycerin, higher concentrations of 1 and 10 μM of KF31327 are inhibits platelet aggregation in a concentration-dependent manner.[2] Thioquinapiperifil dihydrochloride (KF31327) shows a significant increase in cyclic GMP at 10 μM. After 5 min incubation, the mean cyclic GMP levels of KF31327-treated cells is 0.95±0.17 pmol/10 8 cells.[2]

Solubility Information

Solubility	DMSO: 112.5 mg/mL (231.93 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: 4 mg/mL (8.25 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	2.0616 mL	10.3082 mL	20.6164 mL
5 mM	0.4123 mL	2.0616 mL	4.1233 mL
10 mM	0.2062 mL	1.0308 mL	2.0616 mL
50 mM	0.0412 mL	0.2062 mL	0.4123 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

Uchiyama N, et al. Determination of a new type of phosphodiesterase-5 inhibitor, thioquinapiperifil, in a dietary supplement promoted for sexual enhancement. Chem Pharm Bull (Tokyo). 2008;56(9):1331-1334.
Hirose R, et al. KF31327, a new potent and selective inhibitor of cyclic nucleotide phosphodiesterase 5. Eur J Pharmacol. 2001;431(1):17-24.
Orfi L, et al. Improved, high yield synthesis of 3H-quinazolin-4-ones, the key intermediates of recently developed drugs. Curr Med Chem. 2004;11(19):2549-255