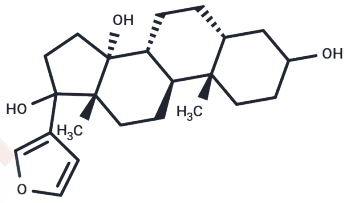
Data Sheet (Cat.No.T2621)

TargetMol

Rostafuroxin

Chemical Properties



CAS No. : 156722-18-8

Formula: C23H34O4

Molecular Weight: 374.51

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	Rostafuroxin (PST 2238) has been used in trials studying the treatment of Essential Hypertension.
Targets(IC50)	ATPase,RSV
Kinase Assay	Kinase assay: Activity assays are conducted using Lance Ultra time-resolved fluorescence resonance energy transfer (TR-FRET) technology from Perkin-Elmer. Briefly, 10 ng/mL FLT3 enzyme, a serial diluted G-749, 80 nM substrate of ULight-poly-GT peptide and variable amounts of ATP (8.5 μM to 1088 μM) are mixed in kinase assay buffer (50 mM HEPES pH 7.5, 10 mM MgCl2, 1 mM EGTA, 2 mM DTT and 0.01% Tween-20) and are added to a 384-well OptiPlate-384 in a volume of 10 μL. Kinase reactions are incubated at room temperature for up to 1 h and then stopped by the addition of 5 μL of 10 mM EDTA. A volume of 5 μL of the specific Eu-labeled-anti-phosphopeptide antibody diluted in LANCE Detection Buffer is then added to a final concentration of 2 nM. After 30-minute incubation, assay plates are incubated at 23°C and the LANCE signal is measured on an EnVision Multilabel Reader. Excitation wavelength is set at 320 nm and emission monitored at 615 nm (donor) and 665 nm (acceptor). The IC50 is calculated using nonlinear regression analysis analysis by GradPad Prism 5.

Solubility Information

Solubility	DMSO: 50 mg/mL (133.51 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 (5.34 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	2.6702 mL	13.3508 mL	26.7016 mL
5 mM	0.534 mL	2.6702 mL	5.3403 mL
10 mM	0.267 mL	1.3351 mL	2.6702 mL
50 mM	0.0534 mL	0.267 mL	0.534 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

Wenceslau CF, Rossoni LV. J Hypertens. 2014 Mar; 32(3): 542-54.
Gan H, Qi M, Chan C, et al. Digitoxin inhibits HeLa cell growth through the induction of G2/M cell cycle arrest and apoptosis in vitro and in vivo. International journal of oncology. 2020
Gan H, Qi M, Chan C, et al. Digitoxin inhibits HeLa cell growth through the induction of G2/M cell cycle arrest and apoptosis in vitro and in vivo[J]. International journal of oncology . 2020.