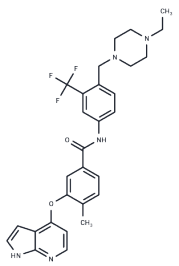
Data Sheet (Cat.No.T5643)

TargetMol

NG25

Chemical Properties



CAS No. : 1315355-93-1

Formula: C29H30F3N5O2

Molecular Weight: 537.58

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	NG25 is a potent dual inhibitor of TAK1 and MAP4K2, with IC50s of 149 nM and 21.7 nM, respectively.
Targets(IC50)	MAPK
In vitro	NG25 sensitizes the breast cancer cells to Dox treatment in vitro. This combination may be an effective and feasible therapeutic option maximizing Dox efficacy and meanwhile minimizing Dox side effects in treating breast cancer[1].
Cell Research	Breast cancer cells were seeded in 12-well plates at 2?×?10^3 cells per well, then incubated with Dox alone or Dox with NG25 at indicated concentrations after 72?h and then were cultured in fresh medium without drug.?Two weeks later, cells were fixed and stained with methanol/crystal violet for 10?min, and photographed.?Each experiment was performed in triplicates[1].

Solubility Information

Solubility	DMSO: 16.67 mg/mL (31.01 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 (3.72 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	1.8602 mL	9.3009 mL	18.6019 mL
5 mM	0.372 mL	1.8602 mL	3.7204 mL
10 mM	0.186 mL	0.9301 mL	1.8602 mL
50 mM	0.0372 mL	0.186 mL	0.372 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

Wang Z , Zhang H , Shi M , et al. TAK1 inhibitor NG25 enhances doxorubicin-mediated apoptosis in breast cancer cells[J]. Scientific Reports, 2016, 6:32737.
Fan S, Huang X, Tong H, et al. p-TAK1 acts as a switch between myoblast proliferation phase and differentiation phase in mdx mice via regulating HO-1 expression. European Journal of Pharmacology. 2022: 175277.
Pauls E , Shpiro N , Peggie M , et al. Essential Role for IKKβ in Production of Type 1 Interferons by Plasmacytoid Dendritic Cells *[J]. Journal of Biological Chemistry, 2012, 287.

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