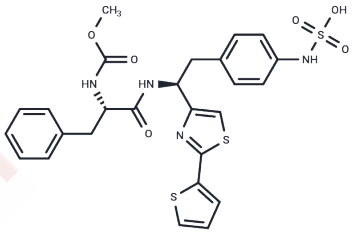
Data Sheet (Cat.No.T16724)

TargetMol

Razuprotafib

Chemical Properties



CAS No. : 1008510-37-9

Formula: C26H26N4O6S3

Molecular Weight: 586.7

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	Razuprotafib (AKB-9778) is a protein tyrosine phosphatase ß (HPTPß) inhibitor with an IC50 of 50 nM. It effectively activates Tie-2 and provides protection against acute kidney injury.
Targets(IC50)	Phosphatase,Tie-2
In vitro	Razuprotafib inhibits the phosphatase activity of VE-PTP with an IC50 of 17 pM. Razuprotafib inhibits the phosphatase PTP1B with an IC50 of 780 nM. Razuprotafib inhibits HPTPη (IC50 = 36 pM) . Razuprotafib inhibits HPTPγ (IC50 = 100 pM). Razuprotafib 0.17 to 50 μM HUVEC 10 minutes in WB concentration-dependent phosphorylation of TIE2 and downstream components of the TIE2 signaling pathway, including eNOS, AKT, and ERK.
In vivo	Rho-VEGF-transgenic mice s.c. injection 20 mg/kg 12 hours promotes phosphorylation of TIE2 in retinal endothelial cells Rho-VEGF mice s.c. injection 10-20 mg/kg twice daily for 7 days suppresses subretinal neovascularization.

Solubility Information

Solubility	DMSO: 150 mg/mL (255.67 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 (6.82 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	1.7044 mL	8.5222 mL	17.0445 mL
5 mM	0.3409 mL	1.7044 mL	3.4089 mL
10 mM	0.1704 mL	0.8522 mL	1.7044 mL
50 mM	0.0341 mL	0.1704 mL	0.3409 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

Kevin Peters, et al. METHODS OF TREATING DIABETIC NEPHROPATHY USING HPTPβ INHIBITORS. WO2019165349A1

Shen J, Frye M, Lee BL et al. Targeting VE-PTP activates TIE2 and stabilizes the ocular vasculature. J Clin Invest. 2014 Oct;124(10):4564-76. doi: 10.1172/JCI74527. Epub 2014 Sep 2. PMID: 25180601; PMCID: PMC4191011.