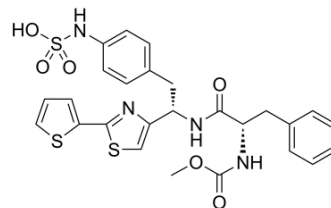


Razuprotafib

Cat. No.:	HY-109041		
CAS No.:	1008510-37-9		
Molecular Formula:	C ₂₆ H ₂₆ N ₄ O ₆ S ₃		
Molecular Weight:	586.7		
Target:	Phosphatase		
Pathway:	Metabolic Enzyme/Protease		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (170.44 mM; Need ultrasonic)

Concentration	Solvent	Mass	Preparing Stock Solutions		
			1 mg	5 mg	10 mg
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

Please refer to the solubility information to select the appropriate solvent.

In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
Solubility: ≥ 2.5 mg/mL (4.26 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
Solubility: ≥ 2.5 mg/mL (4.26 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
Solubility: ≥ 2.5 mg/mL (4.26 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Razuprotafib (AKB-9778) is a potent and selective inhibitor of the catalytic activity of VE-PTP (vascular endothelial protein tyrosine phosphatase) with an IC₅₀ of 17 pM. Razuprotafib promotes TIE2 activation, enhances ANG1-induced TIE2 activation, and stimulates phosphorylation of signaling molecules in the TIE2 pathway, including AKT, eNOS, and ERK. Razuprotafib inhibits the structurally related phosphatase PTP1B with an IC₅₀ of 780 nM. Razuprotafib shows excellent selectivity for VE-PTP versus a variety of phosphatases, with the exception of HPTPη (IC₅₀=36 pM) and HPTPγ (100 pM)^[1].

In Vitro

Razuprotafib (AKB-9778) promotes TIE2 phosphorylation and activation of downstream signaling in HUVECs and enhances

	angiopoietin-induced TIE2 phosphorylation ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	Razuprotafib (20 mg/kg; s.c.) promotes phosphorylation of TIE2 in retinal endothelial cells in vivo ^[1] .Razuprotafib (10-20 mg/kg; s.c.; twice daily for 7 days) suppresses subretinal neovascularization (NV) ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Shen J, et al. Targeting VE-PTP activates TIE2 and stabilizes the ocular vasculature. J Clin Invest. 2014;124(10):4564-4576.

Caution: Product has not been fully validated for medical applications. For research use only.

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