Product Datasheet

Razuprotafib

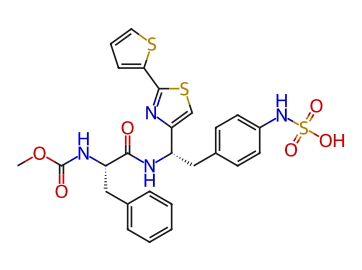
Catalog No. **BP-00054** · CAS **1008510-37-9** · Form **free base** · Physical state **solid** · Color **White to light yellow** · Version **1.0** · Revision **2026-11-04**

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Target	Research area
Phosphatase; Tie	**Inflammation/Immunology**

Molecular formula	$C_{26}H_{26}N_4O_6S_3$
Molecular weight	**586.7030**

STRUCTURE



DESCRIPTION

Razuprotafib (AKB-9778) is a potent and selective inhibitor of the catalytic activity of VE-PTP (vascular endothelial protein tyrosine phosphatase) with an IC50of 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).

BIOLOGICAL ACTIVITY

In Vitro

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

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).

SOLUBILITY

Soluble in DMSO : 100 mg/mL

REFERENCES

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