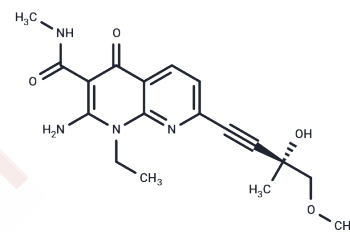


(Rac)-SAR131675

Chemical Properties

CAS No. : 1092539-44-0
 Formula: C₁₈H₂₂N₄O₄
 Molecular Weight: 358.39
 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	(Rac)-SAR131675 is an effective and specific VEGFR-3 inhibitor. It inhibited VEGFR-3 tyrosine kinase activity (IC ₅₀ : 20 nmol/L) and VEGFR-3 autophosphorylation (IC ₅₀ : 45 nmol/L) in HEK cells, respectively. SAR131675 is highly specific for VEGFR-3 versus 107 receptors, enzymes, ion channels, and 65 kinases. SAR131675 is a highly specific VEGFR-3-TK inhibitor with significant antitumoral and antimetastatic activities in vivo through inhibition of lymphangiogenesis and TAM invasion.
Targets(IC ₅₀)	VEGFR
In vitro	SAR131675 dose dependently inhibits the proliferation of primary human lymphatic cells, induced by the VEGFR-3 ligands VEGFC and VEGFD, with an IC ₅₀ of about 20 nM. SAR131675 dose dependently inhibits rh-VEGFR-3-TK activity with an IC ₅₀ of 23 nM. SAR131675 inhibits VEGFR-3-TK activity with a K _i of about 12 nM. SAR131675 inhibits VEGFR-1-TK activity with an IC ₅₀ of > 3 μM and VEGFR-2-TK activity with an IC ₅₀ of 235 nM. SAR131675 inhibits VEGFR-1 autophosphorylation with an IC ₅₀ of about 1 μM and VEGFR-2 with an IC ₅₀ of about 280 nM. SAR131675 moderately inhibits VEGFR-2 and has very little effect on VEGFR-1, showing a good selectivity for VEGFR-3. SAR131675 inhibits VEGFA-induced VEGFR-2 phosphorylation in a dose-dependent manner, with an IC ₅₀ of 239 nM. SAR131675 potently inhibits lymphatic cell survival induced by VEGFC and VEGFD with IC ₅₀ of 14 nM and 17 nM, respectively. SAR131675 inhibits VEGFA-induced survival with an IC ₅₀ of 664 nM. SAR131675, significantly and dose dependently inhibits VEGFC-induced Erk phosphorylation, with an IC ₅₀ of about 30 nM. [1]

Solubility Information

Solubility	DMSO: Slightly soluble, (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.7903 mL	13.9513 mL	27.9026 mL
5 mM	0.5581 mL	2.7903 mL	5.5805 mL
10 mM	0.279 mL	1.3951 mL	2.7903 mL
50 mM	0.0558 mL	0.279 mL	0.5581 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

Alam A, et al. Mol Cancer Ther, 2012, 11(8), 1637-1649.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

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