SZABO SCANDIC

Part of Europa Biosite

Produktinformation

- Forschungsprodukte & Biochemikalien
- Zellkultur & Verbrauchsmaterial
- Diagnostik & molekulare Diagnostik
- Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!

Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

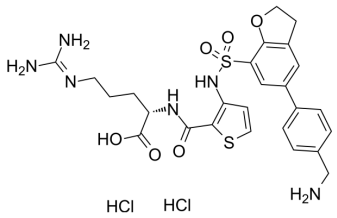
mail@szabo-scandic.com

www.szabo-scandic.com

linkedin.com/company/szaboscandic

EG01377 dihydrochloride

Cat. No.:	HY-112151A
CAS No.:	2749438-61-5
Molecular Formula:	$C_{26}H_{32}Cl_2N_6O_6S_2$
Molecular Weight:	659.6
Target:	Complement System
Pathway:	Immunology/Inflammation
Storage:	-20°C, stored under nitrogen, away from moisture * In solvent : -80°C, 6 months; -20°C, 1 month (stored under nitrogen, away from moisture)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 200 mg/mL (303.21 mM; Need ultrasonic)

Preparing Stock Solutions	Mass / Solvent / Concentration	1 mg	5 mg	10 mg
	1 mM	1.5161 mL	7.5804 mL	15.1607 mL
	5 mM	0.3032 mL	1.5161 mL	3.0321 mL
	10 mM	0.1516 mL	0.7580 mL	1.5161 mL

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

In Vivo

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 5 mg/mL (7.58 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 5 mg/mL (7.58 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 5 mg/mL (7.58 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

EG01377 dihydrochloride is a potent, bioavailable and selective inhibitor of neuropilin-1 (NRP1), with a K_d of 1.32 μM, and IC_{50}s of 609 nM for both NRP1-a1 and NRP1-b1. EG01377 dihydrochloride has antiangiogenic, antimigratory, and antitumor effects[1].

IC_{50} & Target

IC50: 609 nM (NRP1-a1 and NRP1-b)[1]

In Vitro

EG01377 (3-30 μM; 30 minutes) inhibits vascular endothelial growth factor A (VEGF-A) stimulated tyrosine phosphorylation of VEGF-R2/KDR[1].

EG01377 (30 μM) is able to significantly reduce HUVEC cell migration in response to VEGFA[1].
EG01377 (30 μM; 5 days) can delay the VEGF-induced wound closure[1].
EG01377 (30 μM) reduces network area, length, and branching points[1].
EG01377 (30 μM; 7 days) reduces VEGF-induced angiogenesis[1].
EG01377 (30 μM; 7 days) in combination with VEGFA reduces A375P (malignant melanoma) spheroid outgrowth[1].
EG01377 (500 nM; 2 hours) blocks the production of transforming growth factor beta (TGFβ) by $Nrp1^+$ regulatory T-cell SMAD3/AKT (Tregs) in the presence of tumor cell-derived factors[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Western Blot Analysis[1]

Cell Line:	Human umbilical vein endothelial cells (HUVECs)
Concentration:	3, 10, 30 μM
Incubation Time:	30 minutes
Result:	Inhibited VEGF-A stimulated tyrosine phosphorylation of VEGF-R2/KDR with an IC_{50} of 30 μM.

In Vivo

EG01377 (2 mg/kg; i.v.) exhibits an encouraging half-life of 4.29 h, sufficient to sustain once per day dosing in mice[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	6-8 week-old BABL/c female mice[1]
Dosage:	2 mg/kg (Pharmacokinetic Analysis)
Administration:	I.v. administration
Result:	The half time ($T_{1/2}$) of 4.29 h.

CUSTOMER VALIDATION

- Cell Death Dis. 2023 Feb 25;14(2):159.
- Cancers (Basel). 2023 Apr 10, 15(8), 2225.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Powell J, et al. Small Molecule Neuropilin-1 Antagonists Combine Antiangiogenic and Antitumor Activity with Immune Modulation through Reduction of Transforming Growth Factor Beta (TGFβ) Production in Regulatory T-Cells. J Med Chem. 2018 May 10;61(9):4135-4154.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA