
Product Data Sheet

Product Name: VEGFR-3-IN-1

Cat. No.: GC64205

Chemical Properties

Cas. No. 2756668-73-0

Formula C₂₉H₂₉ClF₃N₇O₅

M.Wt

616.1

Solubility

Storage

Store at -20°C

General tips

For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

Structure

Background

VEGFR-3-IN-1 is a potent and selective VEGFR3 inhibitor with an IC₅₀ of 110.4 nM. VEGFR-3-IN-1 significantly inhibits proliferation and migration of VEGF-C-induced human dermal lymphatic endothelial cells (HDLEC), MDA-MB-231, and MDA-MB-436 cells by inactivating the VEGFR3 signaling pathway, and also effectively inhibits breast cancer growth[1].

VEGFR-3-IN-1 (compound 38k) exhibits a significantly higher antiproliferative activity on MDA-MB-231 and MDA-MB-436 cells than 10 (IC₅₀ > 50 μM), with IC₅₀ values of 2.22 and 3.50 μM, respectively[1]. VEGFR-3-IN-1 markedly suppresses the phosphorylation of VEGFR3 and its downstream proteins in a dose-dependent manner[1].

VEGFR-3-IN-1 (50, 25 mg/kg; p.o.) reduces the tumor volume, and displays the strongest inhibitory activity in mice, with a growth inhibition rate of 61.9%[1]. VEGFR-3-IN-1 (10 mg/kg; p.o.) treatment shows the C_{max}, AUC_{0-t} , AUC_{0-∞} and t_{1/2} values of 420 ng/mL, 9219 ng h/mL, 12304 ng h/mL and 16 hours, respectively[1].

[1]. Li Y, Yang G, et al. Discovery, Synthesis, and Evaluation of Highly Selective Vascular Endothelial Growth Factor Receptor 3 (VEGFR3) Inhibitor for the Potential Treatment of Metastatic Triple-Negative Breast Cancer. J Med Chem. 2021;64(16):12022-12048.

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

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