Data Sheet (Cat.No.T214357)

EG01449

Chemical Properties

CAS No. :

Formula:

Molecular Weight:

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	EG01449 is a quinoline-based neuropilin-1 (NRP1) antagonist with a Kd of 0.6 μM. It competitively inhibits the binding of VEGFA to NRP1 with an IC50 of 362 nM, preventing VEGFA-induced pain by inhibiting NRP1-dependent signaling and reducing sodium currents in sensory neurons. EG01449 can cross the blood-brain barrier, allowing for targeted actions within the central nervous system, and is utilized in pain research.
Targets(IC50)	VEGFR
In vitro	EG01449 (30 μM; pretreated for 15 minutes) reduces phosphorylation of p38 induced by VEGFA in retinal endothelial cells and hCMEC/D3. In isolated rat lumbar DRG neurons, EG01449 (30 μM) decreases the increase in sodium current induced by VEGFA 165, while EG01449 alone does not significantly affect Na+ currents.
In vivo	EG01449 (10, 30 μM; subcutaneous injection; single dose) significantly reduces VEGFA-induced aversion to mechanical stimuli and alleviates VEGFA-induced mechanical and cold allodynia in Sprague-Dawley rats.