Nexinhib20

Cat. No.: HY-125792

CAS No.: 331949-35-0

Molecular Formula: $C_{15}H_{16}N_4O_3$

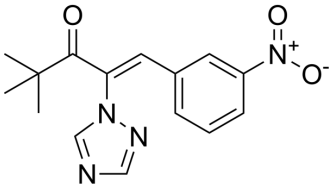
Molecular Weight: 300.31

Target: Ras; Reactive Oxygen Species

Pathway: GPCR/G Protein; MAPK/ERK Pathway; Immunology/Inflammation; Metabolic Enzyme/Protease; NF-κB

Storage:

Powder	-20°C	3 years
In solvent	-80°C	6 months
	-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (332.99 mM; Need ultrasonic)

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	3.3299 mL	16.6495 mL	33.2989 mL
5 mM	0.6660 mL	3.3299 mL	6.6598 mL
10 mM	0.3330 mL	1.6649 mL	3.3299 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: ≥ 2.5 mg/mL (8.32 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (8.32 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Nexinhib20 is a specific Rab27a-JFC1 interaction inhibitor with a calculated IC_{50} of 2.6 μM. Nexinhib20 significantly inhibits superoxide anion production. Nexinhib20 efficiently decreases exocytosis of azurophilic granules in neutrophils stimulated with fMLP, GM-CSF or both. Nexinhib20 has a significant anti-inflammatory activity[1].

IC_{50} & Target

IC50: 2.6 μM (Rab27a-JFC1 interaction)[1]

REFERENCES

[1]. Jennifer L Johnson, et al. Identification of Neutrophil Exocytosis Inhibitors (Nexinhibs), Small Molecule Inhibitors of Neutrophil Exocytosis and Inflammation: DRUGGABILITY OF THE SMALL GTPase Rab27a. J Biol Chem. 2016 Dec 9;291(50):25965-25982.

[2]. Johnson JL, et al. Identification of Neutrophil Exocytosis Inhibitors (Nexinhibs), Small Molecule Inhibitors of Neutrophil Exocytosis and Inflammation: DRUGGABILITY OF THE SMALL GTPase Rab27a. J Biol Chem. 2016 Dec 9;291(50):25965-25982.

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