

Certificate of Analysis

Print Date: Apr 4th 2024

www.tocris.com

Product Name: Nexinhib20 Catalog No.: 6089 Batch No.: 2

CAS Number: 331949-35-0

IUPAC Name: 4,4-Dimethyl-1-(3-nitrophenyl)-2-(1*H*-1,2,4-triazol-1-yl)-1-penten-3-one

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{15}H_{16}N_4O_3$.Batch Molecular Weight:300.31Physical Appearance:White solid

Solubility: DMSO to 100 mM Storage: Store at +4°C

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC: Shows 99.1% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 59.99 5.37 18.66 Found 60.26 5.45 18.84

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use



Product Information

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Description:

Nexinhib20 is a Rab27 inhibitor ($IC_{50} = 330$ nM); inhibits Rab27a-JFC1 binding. Selectively inhibits neutrophil exocytosis, with no significant effect on other important innate immune responses including phagocytosis. Suppresses extracellular production of superoxide anion and cytochrome b plasma membrane expression. Also inhibits upregulation of adhesion molecules CD11b and CD66b. Displays in vivo anti-inflammatory activity.

Physical and Chemical Properties:

Batch Molecular Formula: C₁₅H₁₆N₄O₃. Batch Molecular Weight: 300.31 Physical Appearance: White solid

Minimum Purity: ≥98%

Batch Molecular Structure:

Storage: Store at +4°C

Solubility & Usage Info:

DMSO to 100 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. *Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Johnson *et al* (2016) Identification of neutrophil exocytosis inhibitors (Nexinhibs), small molecule inhibitors of neutrophil exocytosis and inflammation: druggability of the small GTPase Rab27a. J.Biol.Chem. **291** 25965. PMID: 27702998.

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