

Certificate of Analysis

Print Date: Oct 12th 2022

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Product Name: RQ 00203078 Catalog No.: 5388 Batch No.: 1

CAS Number: 1254205-52-1

IUPAC Name: 4-[[[3-Chloro-5-(trifluoromethyl)-2-pyridinyl][[4-(trifluoromethoxy)phenyl]methyl]amino]sulfonyl]benzoic acid

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{21}H_{13}CIF_6N_2O_5S$

Batch Molecular Weight: 554.85 **Physical Appearance:** White solid

Solubility: DMSO to 100 mM

ethanol to 100 mM

Storage: Store at +4°C

Batch Molecular Structure:

2. ANALYTICAL DATA

TLC: $R_f = 0.1$ (Ethyl acetate:Petroleum ether [1:3])

HPLC: Shows 98.4% purity

¹H NMR: Consistent with structure Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 45.46 2.36 5.05 Found 45.84 2.32 5.06

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



Product Information

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Description:

RQ 00203078 is a potent TRPM8 antagonist (IC $_{50}$ values are 5.3 and 8.3 nM for rat and human channels respectively). Exhibits >350-fold selectivity for TRPM8 over TRPV4, TRPV1 and TRPA1. Reduces HSC3 and HSC4 oral squamous carcinoma cell migration and invasion in vitro. Also attenuates icilin-induced wet dog shakes in rats. Orally active.

Physical and Chemical Properties:

Batch Molecular Formula: C₂₁H₁₃CIF₆N₂O₅S

Batch Molecular Weight: 554.85 Physical Appearance: White solid

Minimum Purity: ≥98%

Batch Molecular Structure:

Storage: Store at +4°C

Solubility & Usage Info:

DMSO to 100 mM ethanol 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. Our standard recommendations are:

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:

Ohmi et al (2014) Identification of a novel 2-pyridyl-benzensulfonamide derivative, RQ-00203078, as a selective and orally active TRPM8 antagonist. Bioorg.Med.Chem.Lett. **24** 5364. PMID: 25455182.

Okamoto et al (2012) Blockade of TRPM8 activity reduces the invasion potential of oral squamous carcinoma cell lines. Int.J.Oncol. 40 1431. PMID: 22267123

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