

Certificate of Analysis

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Product Name: RN 1747

Catalog No.: 3745

Batch No.: 2

CAS Number: 1024448-59-6

IUPAC Name: 1-(4-Chloro-2-nitrophenyl)sulfonyl-4-benzylpiperazine

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₇H₁₈ClN₃O₄S

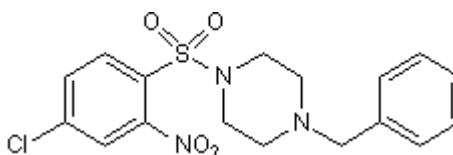
Batch Molecular Weight: 395.87

Physical Appearance: Pale yellow solid

Solubility: DMSO to 100 mM

Storage: Store at +4°C

Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 99.7% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon Hydrogen Nitrogen		
Theoretical	51.58	4.58	10.61
Found	51.16	4.5	10.54

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

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Description:

Selective TRPV4 agonist (EC_{50} values are 0.77, 4.0 and 4.1 μ M for hTRPV4, mTRPV4 and rTRPV4 respectively). Displays selectivity over other TRP channels (EC_{50} values are 0.77, >30, >30 and >100 μ M for TRPV4, TRPM8, TRPV3 and TRPV1 receptors respectively). Also antagonizes TRPM8 at relevant concentrations (IC_{50} = 4 μ M).

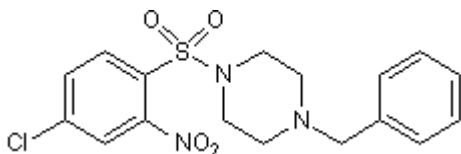
Physical and Chemical Properties:

Batch Molecular Formula: $C_{17}H_{18}ClN_3O_4S$

Batch Molecular Weight: 395.87

Physical Appearance: Pale yellow solid

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. 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:

Vincent et al (2009) Identification and characterization of novel TRPV4 modulators. *Biochem.Biophys.Res.Comms.* **389** 490.

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bio-techne.com

info@bio-techne.com

techsupport@bio-techne.com

North America

Tel: (800) 343 7475

China

info.cn@bio-techne.com

Tel: +86 (21) 52380373

Europe Middle East Africa

Tel: +44 (0)1235 529449

Rest of World

www.tocris.com/distributors

Tel: +1 612 379 2956