

Certificate of Analysis

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Product Name: P005091

Catalog No.: 4733

Batch No.: 1

CAS Number: 882257-11-6

IUPAC Name: 1-[5-[(2,3-Dichlorophenyl)thio]-4-nitro-2-thienyl]ethanone

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₂H₇Cl₂NO₃S₂

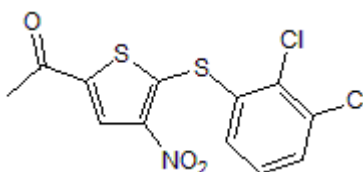
Batch Molecular Weight: 348.22

Physical Appearance: Off-white solid

Solubility: DMSO to 10 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	41.39	2.03	4.02
Found	41.59	2.04	4

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

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Description:

Selective inhibitor of ubiquitin-specific protease (USP) 7 (IC₅₀ = 4.2 μM). Displays little-to-no inhibition of other USP variants or proteases such as caspase, cathepsins and serine proteases; exhibits some activity at USP47. Induces elevated p53 and apoptosis in cancer cell lines; displays antiangiogenic activity in vivo.

Physical and Chemical Properties:

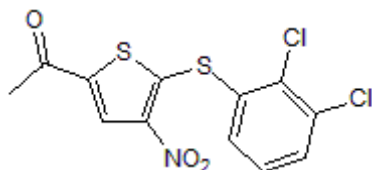
Batch Molecular Formula: C₁₂H₇Cl₂NO₃S₂

Batch Molecular Weight: 348.22

Physical Appearance: Off-white solid

Minimum Purity: >99%

Batch Molecular Structure:



References:

Weinstock et al (2012) Selective dual inhibitors of the cancer-related deubiquitylating proteases USP7 and USP47. *J.Med.Chem.* **3** 789.

Chauhan et al (2012) A small molecule inhibitor of ubiquitin-specific protease-7 induces apoptosis in multiple myeloma cells and overcomes bortezomib resistance. *Cancer Cell.* **22** 345. PMID: 22975377.

Storage: Store at +4°C

Solubility & Usage Info:

DMSO to 10 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.

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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