

Certificate of Analysis

Product Name: NSC 697923

Catalog No.: 4858

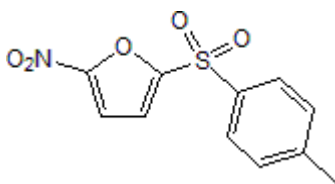
Batch No.: 1

CAS Number: 343351-67-7

IUPAC Name: 2-[(4-Methylphenyl)sulfonyl]-5-nitrofuran

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₁H₉NO₅S
Batch Molecular Weight: 267.26
Physical Appearance: Off-white crystalline solid
Solubility: DMSO to 100 mM
 ethanol to 25 mM with gentle warming
Storage: Store at +4°C
Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.66 (Ethyl acetate:Petroleum ether [1:1])
HPLC: Shows >99.5% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	49.43	3.39	5.24
Found	49.06	3.32	5.23

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

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Description:

Selective inhibitor of the E2 ubiquitin (Ub) conjugating enzyme UBE2N (Ubc13). Inhibits UBE2N-Ub conjugation and activity of the UBE2N-Ueva1A complex. Has no effect on UbcH5c activity. Inhibits NF-κB activation in diffuse large B-cell lymphoma (DLBCL) cells. Inhibits cell growth and induces apoptosis in DLBCL and neuroblastoma (NB) cell lines. Suppresses NB cell xenograft tumor growth in vivo.

Physical and Chemical Properties:

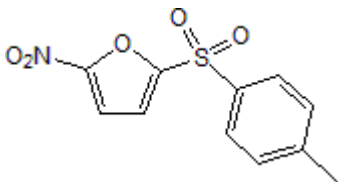
Batch Molecular Formula: C₁₁H₉NO₅S

Batch Molecular Weight: 267.26

Physical Appearance: Off-white crystalline solid

Minimum Purity: >98%

Batch Molecular Structure:



References:

Pulvino et al (2012) Inhibition of proliferation and survival of diffuse large B-cell lymphoma cells by a small-molecule inhibitor of the ubiquitin-conjugating enzyme Ubc13-Uev1A. *Blood* **120** 1668. PMID: 22791293.

Cheng et al (2014) A small-molecule inhibitor of UBE2N induces neuroblastoma cell death via activation of p53 and JNK pathways. *Cell Death Dis.* **5** e1079. PMID: 24556694.

Storage: Store at +4°C

Solubility & Usage Info:

DMSO to 100 mM

ethanol to 25 mM with gentle warming

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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