Print Date: Dec 15th 2011

Certificate of Analysis

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Product Name: SU 3327 **Catalog No.: 3607** **Batch No.: 1**

CAS Number: 40045-50-9

IUPAC Name: 5-[(5-Nitro-2-thiazolyl)thio]-1,3,4thiadiazol-2-amine

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_5H_3N_5O_2S_3$

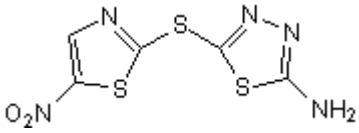
Batch Molecular Weight: 261.3

Physical Appearance: yellow powder

Solubility: DMSO to 100 mM
ethanol to 10 mM

Storage: Store at RT

Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.32 (Ethyl acetate:Hexane [9:1])

HPLC: Shows 99.9% purity

^{1}H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	22.98	1.16	26.8
Found	23.05	1.17	26.72

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Description:

Selective inhibitor of c-Jun N-terminal kinase (JNK) (IC_{50} = 0.7 µM). Inhibits the protein-protein interaction between JNK and JIP (IC_{50} = 239 nM). Displays selectivity over p38 MAPK and Akt. Restores insulin sensitivity in a mouse model of type-2 diabetes.

Physical and Chemical Properties:

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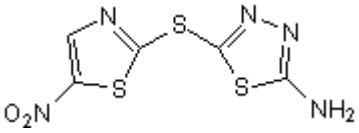
Batch Molecular Weight: 261.3

Physical Appearance: yellow powder

Minimum Purity: >99%

Batch Molecular Structure:



Storage: Store at RT

Solubility & Useage Info:

DMSO to 100 mM
ethanol 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.

References:

De *et al* (2009) Design, synthesis and structure-activity relationship of substrate competitive, selective, and in vivo active triazole and thiadiazole inhibitors of the c-jun N-terminal kinase. J.Med.Chem. ***52*** 1943. PMID: 19271755.