



Certificate of Analysis

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Product Name: TCS 2002 Catalog No.: 3869 Batch No.: 1

CAS Number: 1005201-24-0

IUPAC Name: 2-Methyl-5-[3-[4-(methylsulfinyl)phenyl]-5-benzofuranyl]-1,3,4-oxadiazole

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{18}H_{14}N_2O_3S$

Batch Molecular Weight: 338.38 **Physical Appearance:** white solid

Solubility: DMSO to 100 mM ethanol to 25 mM

Store at +4°C

Batch Molecular Structure:

Storage:

2. ANALYTICAL DATA

TLC: $R_f = 0.47$ (Ethyl acetate:Methanol [9:1])

HPLC: Shows 100% purity

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

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 63.89 4.17 8.27 Found 63.87 4.23 8.36



Product Information

Print Date: Dec 14th 2011

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Description:

Potent inhibitor of GSK-3 β (IC₅₀ = 35 nM). Oral adminstration inhibits cold water stress-induced tau hyperphosphorylation in the mouse brain.

Physical and Chemical Properties:

Batch Molecular Formula: C₁₈H₁₄N₂O₃S

Batch Molecular Weight: 338.38 Physical Appearance: white solid

Minimum Purity: >99% Batch Molecular Structure:

Storage: Store at +4°C

Solubility & Useage Info:

DMSO to 100 mM ethanol to 25 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:

Saitoh *et al* (2009) 2-{3-[4-(alkylsulfinyl)phenyl]-1-benzofuran-5-yl}-5-methyl-1,3,4-oxadiazole derivatives as novel inhibitors of glycogen synthase kinase-3 β with good brain permeability. J.Med.Chem. **52** 6270. PMID: 19775160.

