

Certificate of Analysis

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Product Name: TCS PIM-1 4a

Catalog No.: 3714

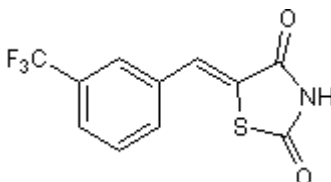
Batch No.: 1

CAS Number: 438190-29-5

IUPAC Name: (5Z)-5-[[3-(Trifluoromethyl)phenyl]methylene]-2,4-thiazolidinedione

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₁H₆F₃NO₂S
Batch Molecular Weight: 273.23
Physical Appearance: Off-white solid
Solubility: DMSO to 100 mM
 ethanol to 100 mM
Storage: Desiccate at +4°C
Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.4 (Chloroform:Methanol [97:3])
HPLC: Shows 98.6% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure

Microanalysis:

| | Carbon | Hydrogen | Nitrogen |
|-------------|--------|----------|----------|
| Theoretical | 48.35 | 2.21 | 5.13 |
| Found | 48.3 | 2.17 | 5.11 |

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

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Description:

Selective, ATP-competitive Pim kinase inhibitor (IC₅₀ values are 24 and 100 nM for Pim-1 and Pim-2 respectively). Displays selectivity over a panel of ~50 other kinases tested. Exhibits cytotoxicity in PC3 prostate carcinoma cells in vitro (IC₅₀ = 17 μM).

Physical and Chemical Properties:

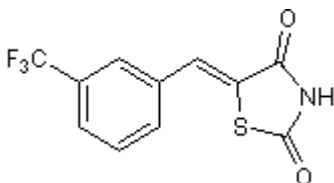
Batch Molecular Formula: C₁₁H₆F₃NO₂S

Batch Molecular Weight: 273.23

Physical Appearance: Off-white solid

Minimum Purity: >98%

Batch Molecular Structure:



Storage: Desiccate at +4°C

Solubility & Usage Info:

DMSO to 100 mM
ethanol 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:

Xia *et al* (2009) Synthesis and evaluation of novel inhibitors of Pim-1 and Pim-2 protein kinases. *J.Med.Chem.* **52** 74. PMID: 19072652.

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