

Certificate of Analysis

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Product Name: HS 38

Catalog No.: 5768

Batch No.: 1

CAS Number: 1030203-81-6

IUPAC Name: 2-[[1-(3-Chlorophenyl)-4,5-dihydro-4-oxo-1H-pyrazolo[3,4-d]pyrimidin-6-yl]thio]propanamide

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₄H₁₂ClN₅O₂S

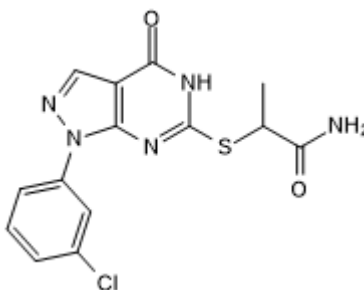
Batch Molecular Weight: 349.8

Physical Appearance: White solid

Solubility: DMSO to 50 mM

Storage: Store at RT

Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.27 (Chloroform:Methanol [9:1])

HPLC: Shows 99.3% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:	Carbon Hydrogen Nitrogen			
Theoretical	48.07	3.46	20.02	
Found	48.16	3.43	19.76	

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

Product Information

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Description:

ATP-competitive inhibitor of DAPK (IC_{50} = 200 nM) and ZIPK (K_d = 280 nM). Also inhibits PIM3 kinase (IC_{50} = 200 nM) but exhibits no significant effect on Src or Abl kinases. Reduces phosphorylation of regulatory myosin light chain and myosin light chain phosphatase in mouse aortic and rabbit ileal tissues.

Physical and Chemical Properties:

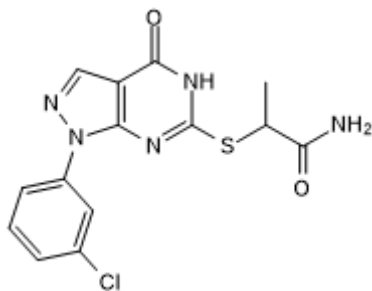
Batch Molecular Formula: $C_{14}H_{12}ClN_5O_2S$

Batch Molecular Weight: 349.8

Physical Appearance: White solid

Minimum Purity: >98%

Batch Molecular Structure:



Storage: Store at RT

Solubility & Usage Info:

DMSO to 50 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:

MacDonald *et al* (2016) A Small Molecule Pyrazolo[3,4-d]Pyrimidinone Inhibitor of Zipper-Interacting Protein Kinase Suppresses Calcium Sensitization of Vascular Smooth Muscle. *Mol.Pharmacol.* **89** 105. PMID: 26464323.

Carlson *et al* (2013) Fluorescence linked enzyme chemoproteomic strategy for discovery of a potent and selective DAPK1 and ZIPK inhibitor. *ACS.Chem.Biol.* **8** 2715. PMID: 24070067.

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