



IUPAC Name:

Certificate of Analysis

www.tocris.com

Product Name: MR 24 Catalog No.: 8122 Batch No.: 1

8-(4-Aminobutyl)-6-[2-chloro-4-(6-methylpyridin-2-yl)phenyl]-2-(1,3-dihydroxypropan-2-ylamino)pyrido[2,3-d]

pyrimidin-7-one trihydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₂₆H₂₉ClN₆O₃.3HCl.H₂O

Batch Molecular Weight: 636.4

Physical Appearance: Yellow solid

Solubility: DMSO to 50 mM

Storage: Store at -20°C

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC: Shows 99.5% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen Chlorine

Theoretical 49.07 5.39 13.21 22.28 Found 48.2 5.63 12.86 19.98

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



Product Information

Print Date: Jul 5th 2024

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pyrimidin-7-one trihydrochloride

Description:

MR 24 is a potent and selective MST3 kinase binding inhibitor with >10 fold selectivity over MST4 (EC $_{50}$ values from NanoBRET assay are 57 nM and 583 nM for MST3 and MST4 respectively). MR 24 increases the number of cells in G $_{1}$ phase of cell cycle, is non-cytotoxic and cell permeable. Shows 90% stability over 1 hour in activated liver microsomes in vivo.

Physical and Chemical Properties:

Batch Molecular Formula: C₂₆H₂₉CIN₆O₃.3HCl.H₂O

Batch Molecular Weight: 636.4 Physical Appearance: Yellow solid

Minimum Purity: ≥98%

Batch Molecular Structure:

ŃΗ₂

Storage: Store at -20°C

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. *Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

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:

Rak et al (2024) Development of selective pyrido[2,3.d]pyrimidin-7(8H).one-based mammalian STE20-Like (MST3/4) kinase inhibitors. J.Med.Chem. 67 3813.

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