

Certificate of Analysis

Print Date: Oct 31st 2022

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Product Name: C28 Catalog No.: 7546 Batch No.: 1

IUPAC Name: 6-(Pyridin-4-yl)-3-(3-(trifluoromethoxy)phenyl)imidazo[1,2-b]pyridazine

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{18}H_{11}F_3N_4O.1^3/4H_2O$

Batch Molecular Weight: 387.83

Physical Appearance: Green solid

Solubility: DMSO to 50 mM

ethanol to 20 mM

Storage: Store at -20°C

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC: Shows 98.8% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 55.75 3.77 14.45 Found 55.61 3.63 14.04

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



Product Information

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IUPAC Name: 6-(Pyridin-4-yl)-3-(3-(trifluoromethoxy)phenyl)imidazo[1,2-b]pyridazine

Description:

C28 is a potent lemur tyrosine kinase 3 (LMTK3) inhibitor (IC $_{50}$ = 67 nM). Disrupts interaction of LMTK3 and HSP90 leading to degradation of LMTK3. Also inhibits CLK, DYRK1 α , IRAK4 and HIPK2 (IC $_{50}$ values are 5 nM, 6 nM, 41 nM and 48 nM respectively). C28 inhibits growth and increases apoptosis in breast cancer cell lines (IC $_{50}$ = 6.5-14.77 μ M) and reduces growth of tumors in xenograft and transgenic mouse models of breast cancer. Also reduces levels of ER α .

Physical and Chemical Properties:

Batch Molecular Formula: C₁₈H₁₁F₃N₄O.1³/₄H₂O

Batch Molecular Weight: 387.83 Physical Appearance: Green solid

Minimum Purity: ≥98%

Batch Molecular Structure:

Storage: Store at -20°C

Solubility & Usage Info:

DMSO to 50 mM ethanol to 20 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.

Licensing Information:

Sold with kind permission of the Giamas lab, University of Sussex

References:

Ditsiou et al (2020) The structure-function relationship of oncogenic LMTK3. Sci.Adv. 6 eabc3099. PMID: 33188023.