



Certificate of Analysis

www.tocris.com

Product Name: ZM 323881 hydrochloride Catalog No.: 2475 Batch No.: 2

CAS Number: 193000-39-4

IUPAC Name: 5-((7-Benzyloxyquinazolin-4-yl)amino)-4-fluoro-2-methylphenol hydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{22}H_{18}FN_3O_2.HCl.\frac{1}{2}H_2O$

Batch Molecular Weight: 420.87

Physical Appearance:Pale yellow solidSolubility:DMSO to 50 mMStorage:Desiccate at +4°C

Batch Molecular Structure:

2. ANALYTICAL DATA

TLC: R_f = 0.44 (Chloroform:Methanol:Ammonia soln. [9:1:5])

HPLC: Shows >99.83% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 62.78 4.79 9.98 Found 62.99 4.58 9.84

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

Product Information

Print Date: Feb 26th 2024

www.tocris.com

2

Product Name: ZM 323881 hydrochloride

CAS Number: 193000-39-4

IUPAC Name: 5-((7-Benzyloxyquinazolin-4-yl)amino)-4-fluoro-2-methylphenol hydrochloride

Description:

ZM 323881 hydrochloride is a potent and selective inhibitor of human vascular endothelial growth factor receptor 2 (VEGFR-2/KDR) activity. Selectively inhibits VEGFR-2 (IC $_{50}$ = 2 nM) over VEGFR-1 and a range of other receptor tyrosine kinases such as PDGFR β , FGFR1, EGFR and erbB2 (IC $_{50}$ > 50 μ M). Inhibits VEGF-A-induced endothelial cell proliferation in vitro (IC $_{50}$ = 8 nM).

Physical and Chemical Properties:

Batch Molecular Formula: C₂₂H₁₈FN₃O₂.HCl.½H₂O

Batch Molecular Weight: 420.87

Physical Appearance: Pale yellow solid

Minimum Purity: ≥99%

Batch Molecular Structure:

Storage: Desiccate at +4°C

Solubility & Usage Info:

DMSO to 50 mM

When purchased as a 1mg unit, this product is supplied in lyophilized form. It may appear as a solid, gel or film and be very hard to visualize. Solutions should be made by adding solvent directly to the vial. The vial should then be vortexed vigorously to ensure the product has completely dissolved.

Catalog No.: 2475

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.

Licensing Information:

Sold with the permission of AstraZeneca UK Ltd.

References:

Endo *et al* (2003) Selective inhibition of vascular endothelial growth factor receptor-2 (VEGFR-2) identifies a central role for VEGFR-2 in human aortic endothelial cell responses to VEGF. J.Recept.Signal Transduct.Res. **23** 239. PMID: 14626450.

Whittles et al (2002) ZM323881, a novel inhibitor of vascular endothelial growth factor-receptor-2 tyrosine kinase activity. Microcirculation 9 513. PMID: 12483548.

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