



Certificate of Analysis

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Product Name: Quizartinib Catalog No.: 6788 Batch No.: 1

CAS Number: 950769-58-1

 $IUPAC\ Name: \ N-[5-(1,1-Dimethylethyl)-3-isoxazolyl]-N-[4-[7-[2-(4-morpholinyl)ethoxy]imidazo[2,1-b]benzothiazol-2-yl]phenyl]urea$

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{29}H_{32}N_6O_4S.\frac{1}{4}H_2O$

Batch Molecular Weight: 565.17

Physical Appearance: Off White solid
Solubility: DMSO to 100 mM
Storage: Store at -20°C

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC: Shows 98.4% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 61.63 5.8 14.87 Found 61.38 5.81 14.82

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Product Information

Print Date: Jan 17th 2019

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Description:

Highly potent FMS-like receptor tyrosine kinase-3 (FLT3) inhibitor (K_d = 1.6 nM, IC₅₀ = 0.56 nM in MV4-11 cell proliferation assay). Displays >10-fold selectivity for FLT3 over panel of 400 kinases. Inhibits FLT3 activity and displays antitumor properties in a mouse MV4-11 tumor xenograft model.

Physical and Chemical Properties:

Batch Molecular Formula: C₂₉H₃₂N₆O₄S.½H₂O

Batch Molecular Weight: 565.17 Physical Appearance: Off White solid

Minimum Purity: >98%

Batch Molecular Structure:

Storage: Store at -20°C

Solubility & Usage Info:

DMSO 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:

Chao *et al* (2009) Identification of *N*-(5-*tert*-butyl-isoxazol-3-yl)-*N*'-{4-[7-(2-morpholin-4-yl-ethoxy)imidazo[2,1-*b*][1,3]benzothiazol-2-yl] phenyl}urea dihydrochloride (AC220), a uniquely potent, selective, and efficacious FMS-like tyrosine kinase-3 (FLT3) inhibitor. J.Med.Chem. *52* 7808. PMID: 19754199.

Zarrinkar et al (2009) AC220 is a uniquely potent and selective inhibitor of FLT3 for the treatment of acute myeloid leukemia (AML). Blood. 114 2984. PMID: 19654408.

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