



Certificate of Analysis

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Product Name: AZD 4547 Catalog No.: 7823 Batch No.: 1

CAS Number: 1035270-39-3

IUPAC Name: rel-N-[5-[2-(3,5-Dimethoxyphenyl)ethyl]-1H-pyrazol-3-yl]-4-[(3R,5S)-3,5-dimethyl-1-piperazinyl]benzamide

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{26}H_{33}N_5O_3.\frac{1}{2}H_2O$

Batch Molecular Weight: 472.57

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

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC: Shows 98.9% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 66.08 7.25 14.82 Found 65.38 7.16 14.54

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



Product Information

Print Date: Feb 13th 2023

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Description:

AZD 4547 is a potent and selective FGFR1, FGFR3 and FGFR2 tyrosine kinase inhibitor (IC $_{50}$ values are 0.2 1.8, and 2.5 nM, respectively). It shows selectivity for FGFR across a range of unrelated tyrosine and serine/threonine kinases, including IGFR (>2,900-fold), CDK2 (>50,000-fold), and p38 (>50,000-fold). In vitro, it has antiproliferative effects on tumor cell lines with deregulated FGFR expression. In vivo, AZD 4547 exhibits dosedependent inhibition of tumor growth in an FGFR-driven human tumor xenograft mice model. It suppresses osteoclastogenesis and tumor-induced osteolysis in an orthotopic breast cancer bone metastasis... Please see product specific page on www.tocris.com for full description.

Physical and Chemical Properties:

Batch Molecular Formula: C₂₆H₃₃N₅O₃.½H₂O

Batch Molecular Weight: 472.57 Physical Appearance: Off-white solid

Minimum Purity: ≥98%

Batch Molecular Structure:

Storage: Store at -20°C

Solubility & Usage Info:

DMSO 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.

References:

Kang et al (2019) A selective FGFR inhibitor AZD4547 suppresses RANKL/M-CSF/OPG-dependent ostoclastogenesis and breast cancer growth in the metastatic bone microenvironment. Sci.Rep. 9 8726. PMID: 31217507.

Gavine *et al* (2012) AZD4547: an orally bioavailable, potent, and selective inhibitor of the fibroblast growth factor receptor tyrosine kinase family. Cancer Res. **72** 2045. PMID: 22369928.

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