

# **Certificate of Analysis**

Print Date: Sep 22nd 2025

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Product Name: AZD 9291 Catalog No.: 8873 Batch No.: 1

CAS Number: 1421373-65-0

IUPAC Name: N-[2-[[2-(Dimethylamino)ethyl]methylamino]-4-methoxy-5-[[4-(1-methyl-1*H*-indol-3-yl)-2-pyrimidinyl]amino]phenyl]-2-

Store at -20°C

propenamide

#### 1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{28}H_{33}N_7O_2$ Batch Molecular Weight:499.61

Physical Appearance: Off White solid

Solubility: DMSO to 50 mM ethanol to 20 mM

**Batch Molecular Structure:** 

Storage:

## 2. ANALYTICAL DATA

HPLC: Shows 99.2% purity

<sup>1</sup>H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 67.31 6.66 19.62 Found 67.25 6.79 19.93

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



# **Product Information**

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#### **Description:**

AZD 9291 is a potent mutant-selective EGFR inhibitor ( $IC_{50}$  values are 1 and 12 nM against EGFR mutants L858R/T790M and L858R, respectively). AZD 9291 exhibited nearly 200 times greater potency against L858R/T790M than wild-type EGFR. In vivo, AZD 9291 causes tumor regression in mutant EGFR xenograft models of non-small cell lung cancer (NSCLC) and transgenic mutant T790M EGFR disease models. AZD 9291 is orally bioavailable.

#### **Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>28</sub>H<sub>33</sub>N<sub>7</sub>O<sub>2</sub> Batch Molecular Weight: 499.61 Physical Appearance: Off White 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. \*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:

Cross et al (2014) AZD9291, an irreversible EGFR TKI, overcomes T790M-mediated resistance to EGFR inhibitors in lung cancer. Cancer Discov. 4 1046. PMID: 24893891.

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