

# **Certificate of Analysis**

Print Date: Oct 12th 2022

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Product Name: WZ 4002 Catalog No.: 6290 Batch No.: 1

CAS Number: 1213269-23-8

IUPAC Name: N-[3-[[5-Chloro-2-[[2-methoxy-4-(4-methyl-1-piperazinyl)phenyl]amino]-4-pyrimidinyl]oxy]phenyl]-2-propenamide

## 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:**  $C_{25}H_{27}CIN_6O_3.1^3/4H_2O$ 

Batch Molecular Weight: 526.5

Physical Appearance: Off White solid
Solubility: DMSO to 10 mM
Storage: Store at -20°C

**Batch Molecular Structure:** 

## 2. ANALYTICAL DATA

**HPLC:** Shows 99.3% purity

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

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 57.03 5.84 15.96 Found 56.62 5.73 15.77



## **Product Information**

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## **Description:**

WZ 4002 is a potent irreversible mutant selective EGFR tyrosine kinase inhibitor. It blocks ATP-dependent autophosphorylation of EGFR carrying the T790M or L858R mutation (IC $_{50}$  = 8 nM). WZ 4002 exhibits selectivity for mutant EGFR over wild-type. In mice bearing T790M mutant lung cancer cell lines WZ 4002 inhibits EGFR, AKT and ERK1/2 phosphorylation and results in significant tumor regression.

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

Batch Molecular Formula: C<sub>25</sub>H<sub>27</sub>ClN<sub>6</sub>O<sub>3</sub>.1<sup>3</sup>/<sub>4</sub>H<sub>2</sub>O

Batch Molecular Weight: 526.5 Physical Appearance: Off White solid

**Minimum Purity**: ≥98%

## **Batch Molecular Structure:**

Storage: Store at -20°C

### Solubility & Usage Info:

DMSO to 10 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 under license from Dana-Farber Cancer Institute.

References:

Zhou et al (2009) Novel mutant-selective EGFR kinase inhibitors against EGFR T790M. Nature 462 1070. PMID: 20033049.