

# **Certificate of Analysis**

Print Date: May 30th 2022

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Product Name: AG 1478 hydrochloride Catalog No.: 1276 Batch No.: 2

CAS Number: 170449-18-0

IUPAC Name: N-(3-Chlorophenyl)-6,7-dimethoxy-4-quinazolinanine hydrochloride

# 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>16</sub>H<sub>14</sub>ClN<sub>3</sub>O<sub>2</sub>.HCl

Batch Molecular Weight: 352.22

Physical Appearance: Cream solid

**Solubility:** DMSO to 10 mM with gentle warming

Storage: Desiccate at -20°C

**Batch Molecular Structure:** 

# 2. ANALYTICAL DATA

**TLC:**  $R_f = 0.38$  (Ethyl acetate:Triethylamine [10:0.003])

**HPLC:** Shows 97.8% purity

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

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 54.56 4.29 11.93 Found 54.53 4.29 11.9

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

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# **Product Information**

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**Product Name: AG 1478 hydrochloride** 

CAS Number: 170449-18-0

IUPAC Name: N-(3-Chlorophenyl)-6,7-dimethoxy-4-quinazolinanine hydrochloride

# **Description:**

AG 1478 hydrochloride is a potent and selective inhibitor of epidermal growth factor receptor kinase (IC $_{50}$  values 3 nM for EGFR and > 100  $\mu$ M for ErbB2 and PDGFR). Inhibits proliferation of NCI-H2170 NSCLC cells in vitro (IC $_{50}$  = 1  $\mu$ M).

# **Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>16</sub>H<sub>14</sub>CIN<sub>3</sub>O<sub>2</sub>.HCI

Batch Molecular Weight: 352.22 Physical Appearance: Cream solid

Minimum Purity: ≥98%

#### **Batch Molecular Structure:**

Storage: Desiccate at -20°C

# Solubility & Usage Info:

DMSO to 10 mM with gentle warming

# 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).

Catalog No.: 1276

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 with the permission of AstraZeneca UK Ltd.

#### References:

**Puri and Salgia** (2008) Synergism of EGFR and c-Met pathways, cross-talk and inhibition, in non-small cell lung cancer. J.Carcinog. **7** 9. PMID: 19240370.

**Eguchi** et al (1998) Calcium-dependent epidermal growth factor receptor transactivation mediates the angiotensin II-induced mitogenactivated protein kinase activation in vascular smooth muscle cells. J.Biol.Chem. **273** 8890. PMID: 9535870.

Han et al (1996) Tyrphostin AG 1478 preferentially inhibits human glioma cells expressing truncated rather than wild-type epidermal growth factor receptors. Cancer Res. 56 3859. PMID: 8752145.