

# **Certificate of Analysis**

Print Date: Feb 8th 2022

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Product Name: TCS ERK 11e Catalog No.: 4465 Batch No.: 2

CAS Number: 896720-20-0

IUPAC Name: 4-[2-[(2-Chloro-4-fluorophenyl)amino]-5-methyl-4-pyrimidinyl]-*N*-[(1*S*)-1-(3-chlorophenyl)-2-hydroxyethyl]-1*H*-pyrrole-

2-carboxamide

## 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:**  $C_{24}H_{20}CI_2FN_5O_2.\frac{1}{4}H_2O$ 

Batch Molecular Weight: 504.85

Physical Appearance: Off White solid

**Solubility:** DMSO to 100 mM ethanol to 25 mM

Storage: Store at -20°C

**Batch Molecular Structure:** 

#### 2. ANALYTICAL DATA

**HPLC:** Shows 98.9% purity

Chiral HPLC: Shows 99.4% purity

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

Mass Spectrum: Consistent with structure

**Optical Rotation:**  $[\alpha]_D = -180.6$  (Concentration = 0.33, Solvent = Ethanol)

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 57.1 4.09 13.87 Found 57.03 4.04 13.61

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



# **Product Information**

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#### **Description:**

TCS ERK 11e is a potent and selective extracellular signal-related kinase 2 (ERK2) inhibitor ( $K_i$  values are <2, 395, 540 and 852 nM for ERK2, GSK-3, Aurora Kinase A and Cdk2 respectively). Potently blocks proliferation of HT29 cells ( $IC_{50}$  = 48 nM). Orally bioavailable.

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

Batch Molecular Formula: C<sub>24</sub>H<sub>20</sub>Cl<sub>2</sub>FN<sub>5</sub>O<sub>2</sub>.1/<sub>4</sub>H<sub>2</sub>O

Batch Molecular Weight: 504.85 Physical Appearance: Off White solid

Minimum Purity: ≥98%

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

Storage: Store at -20°C

### Solubility & Usage Info:

DMSO to 100 mM ethanol to 25 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:

**Aronov** *et al* (2009) Structure-guided design of potent and selective pyrimidylpyrrole inhibitors of extracellular signal-related kinase (ERK) using conformational control. J.Med.Chem. *52* 6362. PMID: 19827834.

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