



# **Certificate of Analysis**

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Product Name: TC JL 37 Catalog No.: 6125 Batch No.: 1

CAS Number: 1258294-34-6

IUPAC Name: 2-Chloro-4-cyano-6-fluoro-*N*-[2-[[[(1*R*,2*R*)-2-fluorocyclopropyl]carbonyl]amino]-4-pyridinyl]benzamide

#### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:**  $C_{17}H_{11}CIF_2N_4O_2$ 

Batch Molecular Weight: 376.74

Physical Appearance: Pale yellow solid

Solubility: DMSO to 100 mM

Storage: Store at +4°C

**Batch Molecular Structure:** 

## 2. ANALYTICAL DATA

**TLC:**  $R_f = 0.19$  (Ethyl acetate:Petroleum ether [1:1])

**HPLC:** Shows 99.1% purity **Chiral HPLC:** Shows 98.4% purity

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

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 54.2 2.94 14.87 Found 54.24 3.05 14.55

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## **Product Information**

Print Date: Jan 16th 2019

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## **Description:**

Potent inhibitor of tyrosine kinase 2 (TYK2,  $K_i$  = 1.6 nM). Shows some selectivity for TYK2 over JAK1/2/3. Inhibits IFNy production in vivo in mice. Orally bioavailable.

## **Physical and Chemical Properties:**

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Batch Molecular Weight: 376.74

Physical Appearance: Pale yellow solid

Minimum Purity: >98%

## **Batch Molecular Structure:**

Storage: Store at +4°C

## Solubility & Usage Info:

DMSO to 100 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:

Liang et al (2013) Lead optimization of a 4-aminopyridine benzamide scaffold to identify potent, selective, and orally bioavailable TYK2 inhibitors. J.Med.Chem. **56** 4521. PMID: 23668484.