

# **Certificate of Analysis**

Print Date: Sep 3<sup>rd</sup> 2021

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Product Name: YKL 5-124 Catalog No.: 7157 Batch No.: 1

CAS Number: 1957203-01-8

IUPAC Name: N-[(1S)-2-(Dimethylamino)-1-phenylethyl]-4,6-dihydro-6,6-dimethyl-3-[[4-[(1-oxo-2-propen-1-yl)amino]benzoyl]

amino]pyrrolo[3,4-c]pyrazole-5(1H)-carboxamide

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>28</sub>H<sub>33</sub>N<sub>7</sub>O<sub>3</sub>.H<sub>2</sub>O

**Batch Molecular Weight:** 533.64 **Physical Appearance:** White solid

**Solubility:** DMSO to 20 mM

ethanol to 20 mM

Storage: Store at -20°C

**Batch Molecular Structure:** 

#### 2. ANALYTICAL DATA

HPLC: Shows 95.5% purity

Chiral HPLC: Shows 99.8% purity

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

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 63.02 6.61 18.37 Found 62.7 6.54 18.2

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

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# **Product Information**

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#### **Description:**

YKL-5-124 is a potent and selective CDK7/Mat1/CycH and cyclin dependent kinase (CDK7) inhibitor (IC $_{50}$  values = 9.7 nM and 53.5 nM, respectively). YKL-5-124 shows 100-fold selectivity over CDK9 and CDK2. YKL-5-124 induces cell cycle arrest at the G $_{1}$ /S transition, inhibits E2F-driven gene expression and inhibits CDK1 and CDK3 T-loop phosphorylation.

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

Batch Molecular Formula: C<sub>28</sub>H<sub>33</sub>N<sub>7</sub>O<sub>3</sub>.H<sub>2</sub>O

Batch Molecular Weight: 533.64 Physical Appearance: White solid

Minimum Purity: ≥95%

# **Batch Molecular Structure:**

Storage: Store at -20°C

# Solubility & Usage Info:

DMSO to 20 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. 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:

Olson et al (2019) Development of a selective CDK7 covalent inhibitor reveals predominant cell-cycle phenotype. Cell Chem.Biol. 26 792. PMID: 30905681.

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