

# **Certificate of Analysis**

Print Date: Apr 5th 2023

Batch No.: 1

www.tocris.com

Catalog No.: 7676

Product Name: JQKD 82 dihydrochloride

CAS Number: 2863635-05-4

IUPAC Name: 2,4-Diisopropoxyphenyl 2-(((2-((dimethylamino)ethyl)(ethyl)amino)-2-oxoethyl)amino)methyl)isonicotinate

dihydrochloride

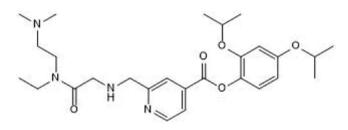
## 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:**  $C_{27}H_{40}N_4O_5.2HCl.2\%H_2O$ 

Batch Molecular Weight: 623.1

Physical Appearance:Pale yellow solidSolubility:DMSO to 50 mMStorage:Store at -20°C

**Batch Molecular Structure:** 



2HCI

## 2. ANALYTICAL DATA

**HPLC:** Shows 98.1% purity

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

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 52.05 7.68 8.99 Found 51.2 7.34 8.86

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



## **Product Information**

Print Date: Apr 5th 2023

1

www.tocris.com

Product Name: JQKD 82 dihydrochloride

CAS Number: 2863635-05-4

IUPAC Name: 2,4-Diisopropoxyphenyl 2-(((2-((dimethylamino)ethyl)(ethyl)amino)-2-oxoethyl)amino)methyl)isonicotinate

dihydrochloride

### **Description:**

JQKD 82 dihydrochloride is cell-permeable, selective inhibitor of lysine demethylase 5 (KDM5). JQKD 82 does not show activity toward other KDMs; and it has selectivity for KDM5A over other KDM5 isoforms. JQKD 82 causes hypermethylation of H3K4me3, downregulation of MYC targets and RNAPII phosphorylation; it suppresses multiple myeloma cell (MM.1S) growth (IC $_{50}$  = 0.42 µmol/L). JQKD 82-treated tumors display an increase in H3K4me3 levels and results in a reduction of MYC immuno-staining in NSG mice.

## **Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>27</sub>H<sub>40</sub>N<sub>4</sub>O<sub>5</sub>.2HCl.2<sup>3</sup>/<sub>4</sub>H<sub>2</sub>O

Batch Molecular Weight: 623.1

Physical Appearance: Pale yellow solid

## Minimum Purity: ≥98%

**Batch Molecular Structure:** 

2HCI

**Storage:** Store at -20°C. This product is packaged under an inert atmosphere.

Catalog No.: 7676

## Solubility & Usage Info:

DMSO to 50 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:

**Ohguchi** *et al* (2021) Lysine demethylase 5A is required for MYC driven transcription in multiple myeloma. Blood Cancer Discov. **2** 370. PMID: 34258103.

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