

# **Certificate of Analysis**

Print Date: Jul 13th 2022

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**Product Name: NVP BSK 805** Catalog No.: 5818 Batch No.: 1

CAS Number: 2320258-95-3

**IUPAC Name:** 8-[3,5-Difluoro-4-(4-morpholinylmethyl)phenyl]-2-[1-(4-piperidinyl)-1*H*-pyrazol-4-yl]quinoxaline trihydrochloride

## 1. PHYSICAL AND CHEMICAL PROPERTIES

 $C_{27}H_{28}F_2N_6O.3HCI.3H_2O$ **Batch Molecular Formula:** 

**Batch Molecular Weight:** 653.99

**Physical Appearance:** Yellow solid

DMSO to 50 mM Solubility:

water to 100 mM

Storage: Store at +4°C

**Batch Molecular Structure:** 

## 2. ANALYTICAL DATA

HPLC: Shows 98.7% purity

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

Microanalysis: Carbon Hydrogen Nitrogen

> Theoretical 49.59 5.7 12.85

> Found 49.51 5.44 12.78



## **Product Information**

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## **Description:**

NVP BSK 805 is a potent JAK2 inhibitor ( $IC_{50} = 0.48$  nM). Exhibits >20-fold selectivity for JAK2 over TYK2, JAK3 and JAK1 ( $IC_{50}$  values are 10.8, 18.7 and 31.6 nM, respectively). Inhibits proliferation and induces apoptosis of JAK2 $^{\circ}$ 617F-bearing acute myeloid leukemia cells in vitro and in vivo. Also inhibits erythropoietin-induced polycythemia. Orally bioavailable.

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

Batch Molecular Formula: C<sub>27</sub>H<sub>28</sub>F<sub>2</sub>N<sub>6</sub>O.3HCI.3H<sub>2</sub>O

Batch Molecular Weight: 653.99 Physical Appearance: Yellow solid

Minimum Purity: ≥98%

## **Batch Molecular Structure:**

Storage: Store at +4°C

## Solubility & Usage Info:

DMSO to 50 mM water 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:

**Baffert** *et al* (2010) Potent and selective inhibition of polycythemia by the quinoxaline JAK2 inhibitor NVP-BSK805. Mol.Cancer Ther. **9** 1945. PMID: 20587663.

**Pissot-Soldermann** *et al* (2010) Discovery and SAR of potent, orally available 2,8-diaryl-quinoxalines as a new class of JAK2 inhibitors. Bioorg.Med.Chem.Lett. **20** 2609. PMID: 20231096.