

# **Certificate of Analysis**

Print Date: Aug 12th 2020

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Product Name: OF 1 Catalog No.: 5289 Batch No.: 1

CAS Number: 919973-83-4

IUPAC Name: 4-Bromo-*N*-(2,3-dihydro-6-methoxy-1,3-dimethyl-2-oxo-1*H*-benzimidazol-5-yl)-2-methylbenzenesulfonamide

## 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>17</sub>H<sub>18</sub>BrN<sub>3</sub>O<sub>4</sub>S

Batch Molecular Weight: 440.31

Physical Appearance: Beige solid

Solubility: DMSO to 20 mM Storage: Store at +4°C

**Batch Molecular Structure:** 

#### 2. ANALYTICAL DATA

**HPLC:** Shows 99.3% purity

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

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 46.37 4.12 9.54 Found 46.56 4.14 9.61



## **Product Information**

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IUPAC Name: 4-Bromo-N-(2,3-dihydro-6-methoxy-1,3-dimethyl-2-oxo-1H-benzimidazol-5-yl)-2-methylbenzenesulfonamide

#### **Description:**

Selective BRPF1B and BRPF2 bromodomain inhibitor ( $K_d$  values are 100 and 500 nM respectively). Exhibits 39-fold selectivity for BRPF1B and BRPF2 over BRD4. Accelerates FRAP recovery at 5  $\mu$ M in a BRPF2 FRAP assay. Inhibits RANKL-induced differentiation of primary murine bone marrow cells and human primary monocytes into osteoclasts.

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

Batch Molecular Formula: C<sub>17</sub>H<sub>18</sub>BrN<sub>3</sub>O<sub>4</sub>S

Batch Molecular Weight: 440.31 Physical Appearance: Beige solid

**Minimum Purity:** ≥98%

## **Batch Molecular Structure:**

Storage: Store at +4°C

## Solubility & Usage Info:

DMSO 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:**

This probe is supplied in conjunction with the Structural Genomics Consortium. For further characterization details, please visit the OF 1 probe summary on the SGC website.

#### References:

**Meier** et al (2017) Selective targeting of bromodomains of the bromodomain-PHD fingers family impairs osteoclast differentiation. ACS Chem.Biol. **12** 2619. PMID: 28849908.

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