



# **Certificate of Analysis**

www.tocris.com

Product Name: BMS 688521 Catalog No.: 4970 Batch No.: 1

CAS Number: 893397-44-9

IUPAC Name: 6-[(5S,9R)-9-(4-Cyanophenyl)-3-(3,5-dichlorophenyl)-1-methyl-2,4-dioxo-1,3,7-triazaspiro[4,4]non-7-yl]-3-

pyridinecarboxylic acid

#### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:**  $C_{26}H_{19}Cl_2N_5O_4.H_2O$ 

Batch Molecular Weight: 554.39

Physical Appearance: Off White solid
Solubility: DMSO to 100 mM
Storage: Store at -20°C

**Batch Molecular Structure:** 

## 2. ANALYTICAL DATA

**TLC:**  $R_f = 0.35$  (Dichloromethane:Methanol [95:5])

HPLC: Shows 98.1% purity
Chiral HPLC: Shows 99.6% purity

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

**Optical Rotation:**  $[\alpha]_D = +90$  (Concentration = 1, Solvent = Methanol)

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 56.33 3.82 12.63 Found 56.26 3.79 12.49

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



# **Product Information**

Print Date: Aug 30th 2018

www.tocris.com

Product Name: BMS 688521 Catalog No.: 4970 Batch No.: 1

CAS Number: 893397-44-9

IUPAC Name: 6-[(5S,9R)-9-(4-Cyanophenyl)-3-(3,5-dichlorophenyl)-1-methyl-2,4-dioxo-1,3,7-triazaspiro[4,4]non-7-yl]-3-

pyridinecarboxylic acid

#### **Description:**

Potent inhibitor of the LFA-1/ICAM-1 interaction ( $IC_{50}$  values are 2.5 and 78 nM in HUVEC adhesion and mouse specific adhesion assays respectively). Inhibits eosinophil accumulation in the lungs in a mouse allergic eosinophilic lung inflammation model.

# **Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>26</sub>H<sub>19</sub>Cl<sub>2</sub>N<sub>5</sub>O<sub>4</sub>.H<sub>2</sub>O

Batch Molecular Weight: 554.39 Physical Appearance: Off White solid

Minimum Purity: >98%

#### **Batch Molecular Structure:**

Storage: Store at -20°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:

**Watterson** *et al* (2010) Small molecule antagonist of leukocyte function associated antigen-1 (LFA-1): structure-activity relationships leading to the identification of 6-((5S,9R)-9-(4-cyanophenyl)-3-(3,5-dichlorophenyl)-1-methyl-2,4-dioxo-1,3,7-triazaspiro[4.4]nonan-7-yl) nicotinic acid (BMS-688521). J.Med.Chem. *53* 3814. PMID: 20405922.

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