

# **Certificate of Analysis**

www.tocris.com

Product Name: (±)-NBI 74330 Catalog No.: 4528 Batch No.: 1

CAS Number: 473722-68-8

IUPAC Name: N-1-[(3-4(-Ethoxyphenyl)-3,4-dihydro-4-oxopyrido[2,3-d]pyrimidin-2-yl]ethyl]-4-fluoro-N-(3-pyridinylmethyl)-3-

(trifluoromethyl)benzeneacetamide

#### 1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:  $C_{32}H_{27}F_4N_5O_3.H_2O$ 

Batch Molecular Weight: 623.6

Physical Appearance: White solid

Solubility: DMSO to 50 mM Storage: Store at -20°C

**Batch Molecular Structure:** 

### 2. ANALYTICAL DATA

**TLC:**  $R_f = 0.22$  (Dichloromethane:Methanol:Et3N [90:9:1])

HPLC: Shows >98.8% purity
<sup>1</sup>H NMR: Consistent with structure
Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 61.63 4.69 11.23 Found 61.45 4.53 11.34



## **Product Information**

Print Date: Mar 24th 2014

www.tocris.com

Product Name: (±)-NBI 74330 Catalog No.: 4528 Batch No.: 1

CAS Number: 473722-68-8

**IUPAC Name:** N-1-[(3-4(-Ethoxyphenyl)-3,4-dihydro-4-oxopyrido[2,3-d|pyrimidin-2-yl]ethyl]-4-fluoro-N-(3-pyridinylmethyl)-3-

(trifluoromethyl)benzeneacetamide

#### **Description:**

Potent and selective CXCR3 antagonist; potently inhibits 125I-CXCL10 binding to CXCR3 (p $K_i = 8.13$ ). Inhibits calcium mobilization in response to CXCL11 and CXCL10 in RBL cells. Exhibits no significant effect on chemotaxis induced by CXCR4 or CCR7. Displays a five-fold greater affinity for CXCR3 than (±)-AMG 487 (Cat. No. 4487).

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

Batch Molecular Formula: C<sub>32</sub>H<sub>27</sub>F<sub>4</sub>N<sub>5</sub>O<sub>3</sub>.H<sub>2</sub>O

Batch Molecular Weight: 623.6 Physical Appearance: White solid

Minimum Purity: >98%

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

Storage: Store at -20°C

#### Solubility & Usage Info:

DMSO to 50 mM

This compound is racemic.

#### 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:

Heise et al (2005) Pharmacological characterization of CXC chemokine receptor 3 ligands and a small molecule antagonist. J.Pharmacol.Exp.Ther. 313 1263. PMID: 15761110.

Storelli et al (2007) Synthesis and structure-activity relationships of 3H-quinazolin-4-ones and 3H-pyrido[2,3-d]pyrimidin-4-ones as CXCR3 receptor antagonists. Arch. Pharm. 340 281. PMID: 17562560.

Verzijl et al (2008) Noncompetitive antagonism and inverse agonism as mechanism of action of nonpeptidergic antagonists at primate and rodent CXCR3 chemokine receptors. J.Pharmacol.Exp.Ther. 325 544. PMID: 18270317.