# **TOCRIS** b i o s c i e n c e

# Certificate of Analysis

## Print Date: Dec 11th 2013

## www.tocris.com

## Product Name: TC-S 7003

## Catalog No.: 3567 Batch No.: 1

CAS Number: IUPAC Name:

: 847950-09-8 :: 6-(2,6-Dimethylphenyl)-2-[[4-(4-methyl-1-pyrimido[5',4':5,6]pyrimido[1,2-*a*]benzimidazol-5(6*H*)-one

## 1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: Batch Molecular Weight: Physical Appearance: Solubility:

Storage: Batch Molecular Structure: C<sub>31</sub>H<sub>30</sub>N<sub>8</sub>O.½H<sub>2</sub>O 539.63 Yellow solid DMSO to 100 mM ethanol to 10 mM with gentle warming Store at -20°C

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## 2. ANALYTICAL DATA

HPLC: <sup>1</sup>H NMR: Mass Spectrum: Microanalysis:

Shows 99.2% purity Consistent with structure Consistent with structure

	Carbon I	Hydroger	n Nitrogen
Theoretical	69	5.79	20.76
Found	69	5.58	20.78

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

 Corris Bioscience is an R&D Systems company

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# **Product Information**

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### **Description:**

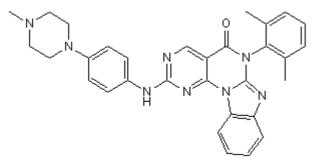
Potent inhibitor of lymphocyte specific kinase (Lck).  $IC_{50}$ values are 0.007, 0.021, 0.042 and 0.20 µM for Lck, Lyn, Src and Syk kinases respectively. Displays >1000-fold selectivity for Lck over MAPK, CDK and RSK family representatives. Inhibits T-cell proliferation in vitro and inhibits arthritis in two in vivo models. Orally active.

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

Batch Molecular Formula: C<sub>31</sub>H<sub>30</sub>N<sub>8</sub>O. ½H<sub>2</sub>O Batch Molecular Weight: 539.63 Physical Appearance: Yellow solid

#### Minimum Purity: >98%

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



### Storage: Store at -20°C

### Solubility & Usage Info:

DMSO to 100 mM ethanol to 10 mM with gentle warming

#### **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:**

Martin et al (2008) Structure-based design of novel 2-amino-6-phenyl-pyrimido[5',4':5,6]pyrimido[1,2-a]benzimidazol-5(6H)-ones as potent and orally active inhibitors of lymphocyte specific kinase (Lck): synthesis, SAR, and in vivo anti-inflammatory activity. J.Med.Chem. 51 1637. PMID: 18278858.

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