

**Product Name:** TC-S 7003

**Catalog No.:** 3567

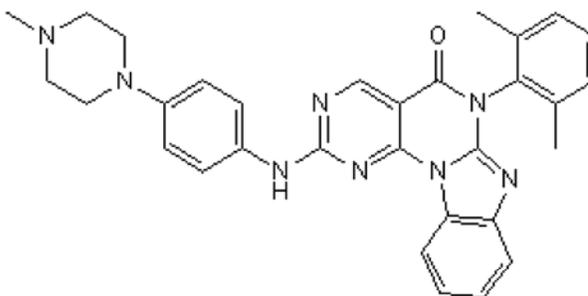
**Batch No.:** 1

CAS Number: 847950-09-8

IUPAC Name: 6-(2,6-Dimethylphenyl)-2-[[4-(4-methyl-1-pyrimido[5',4':5,6]pyrimido[1,2-a]benzimidazol-5(6H)-one

**1. 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  
**Solubility:** DMSO to 100 mM  
ethanol to 10 mM with gentle warming  
**Storage:** Store at -20°C  
**Batch Molecular Structure:**



**2. ANALYTICAL DATA**

**HPLC:** Shows 99.0% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure  
**Microanalysis:**

	Carbon	Hydrogen	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

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**Description:**

Potent inhibitor of lymphocyte specific kinase (Lck). IC<sub>50</sub> 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:**

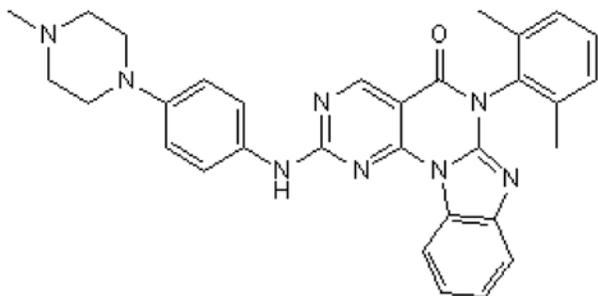
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Batch Molecular Weight: 539.63

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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