

## Certificate of Analysis

[www.tocris.com](http://www.tocris.com)

**Product Name:** PSB 0788

**Catalog No.:** 3199

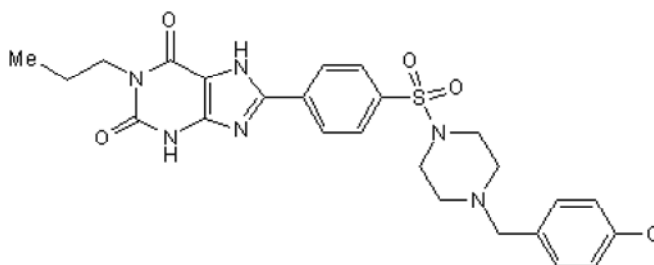
**Batch No.:** 1

CAS Number: 1027513-54-7

IUPAC Name: 8-[4-[4-(4-Chlorobenzyl)piperazine-1-sulfonyl]phenyl]-1-propylxanthine

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>25</sub>H<sub>27</sub>ClN<sub>6</sub>O<sub>4</sub>S  
**Batch Molecular Weight:** 543.04  
**Physical Appearance:** White solid  
**Solubility:** DMSO to 100 mM  
**Storage:** Store at +4°C  
**Batch Molecular Structure:**



### 2. ANALYTICAL DATA

**TLC:** R<sub>f</sub> = 0.63 (Dichloromethane:Methanol [9:1])  
**HPLC:** Shows >98.7% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure  
**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	55.3	5.01	15.48
Found	55.37	4.95	15.53

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

**bio-techne.com**  
 info@bio-techne.com  
 techsupport@bio-techne.com

**North America**  
 Tel: (800) 343 7475

**China**  
 info.cn@bio-techne.com  
 Tel: +86 (21) 52380373

**Europe Middle East Africa**  
 Tel: +44 (0)1235 529449

**Rest of World**  
[www.tocris.com/distributors](http://www.tocris.com/distributors)  
 Tel: +1 612 379 2956

**Product Name:** PSB 0788

**Catalog No.:** 3199

**Batch No.:** 1

CAS Number: 1027513-54-7

IUPAC Name: 8-[4-[4-(4-Chlorobenzyl)piperazine-1-sulfonyl]phenyl]-1-propylxanthine

**Description:**

Potent and selective adenosine A<sub>2B</sub> receptor antagonist (IC<sub>50</sub> = 3.64 nM at human A<sub>2B</sub> receptors). Displays > 100-fold selectivity over hA<sub>1</sub>, hA<sub>2A</sub> and hA<sub>3</sub> receptors.

**Physical and Chemical Properties:**

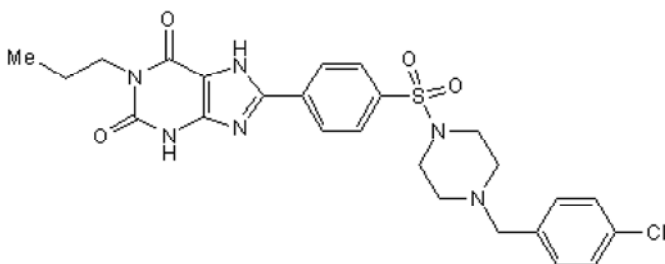
Batch Molecular Formula: C<sub>25</sub>H<sub>27</sub>ClN<sub>6</sub>O<sub>4</sub>S

Batch Molecular Weight: 543.04

Physical Appearance: White solid

**Minimum Purity:** >98%

**Batch Molecular Structure:**



**Storage:** Store at +4°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:**

**Borrmann et al** (2009) 1-alkyl-8-(piperazine-1-sulfonyl)phenylxanthines: development and characterization of adenosine A<sub>2B</sub> receptor antagonists and a new radioligand with subnanomolar affinity and subtype specificity. *J.Med.Chem.* **52** 3994. PMID: 19569717.

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

**bio-techné.com**

info@bio-techné.com

techsupport@bio-techné.com

**North America**

Tel: (800) 343 7475

**China**

info.cn@bio-techné.com

Tel: +86 (21) 52380373

**Europe Middle East Africa**

Tel: +44 (0)1235 529449

**Rest of World**

www.tocris.com/distributors

Tel: +1 612 379 2956