

## Certificate of Analysis

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**Product Name:** BC 11-38

**Catalog No.:** 4496

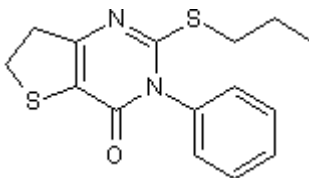
**Batch No.:** 1

CAS Number: 686770-80-9

IUPAC Name: 6,7-Dihydro-3-phenyl-2-(propylthio)thieno[3,2-*d*]pyrimidin-4(3*H*)one

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>15</sub>H<sub>16</sub>N<sub>2</sub>OS<sub>2</sub>  
**Batch Molecular Weight:** 304.43  
**Physical Appearance:** White solid  
**Solubility:** DMSO to 100 mM  
ethanol to 20 mM  
**Storage:** Store at +4°C  
**Batch Molecular Structure:**



### 2. ANALYTICAL DATA

**Melting Point:** At 161°C  
**HPLC:** Shows 98% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	59.18	5.3	9.2
Found	59.23	5.34	9.13

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

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**Description:**

Selective phosphodiesterase (PDE) 11 inhibitor ( $IC_{50} = 0.28 \mu M$  for PDE11;  $IC_{50}$  values are  $>100 \mu M$  for PDE1 - PDE10). Significantly elevates cAMP levels and cortisol production in H295R human adenocarcinoma cells.

**Physical and Chemical Properties:**

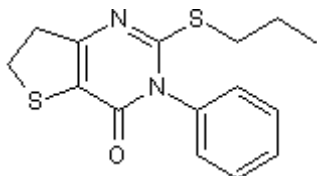
Batch Molecular Formula:  $C_{15}H_{16}N_2OS_2$

Batch Molecular Weight: 304.43

Physical Appearance: White solid

**Minimum Purity:** >98%

**Batch Molecular Structure:**



**Storage:** Store at +4°C

**Solubility & Usage Info:**

DMSO to 100 mM  
ethanol to 20 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:**

**Ceyhan et al** (2012) Identification of biologically active PDE11-selective inhibitors using a yeast-based high-throughput screen. *Chem.Biol.* **19** 155. PMID: 22284362.

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