

## Certificate of Analysis

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**Product Name:** BC 11 hydrobromide

**Catalog No.:** 4372

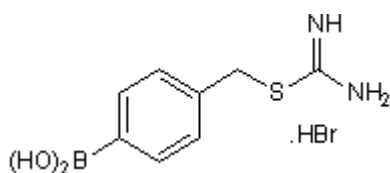
**Batch No.:** 1

CAS Number: 443776-49-6

IUPAC Name: Carbamimidothioic acid (4-boronophenyl)methyl ester hydrobromide

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>8</sub>H<sub>11</sub>BN<sub>2</sub>O<sub>2</sub>S.HBr  
**Batch Molecular Weight:** 290.97  
**Physical Appearance:** White solid  
**Solubility:** DMSO to 100 mM  
 water to 20 mM with gentle warming  
**Storage:** Store at -20°C  
**Batch Molecular Structure:**



### 2. ANALYTICAL DATA

**HPLC:** Shows 98.3% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	33.02	4.16	9.63
Found	33.39	4.19	9.45

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

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**Description:**

Selective urokinase (uPA) inhibitor ( $IC_{50} = 8.2 \mu M$ ). Exhibits no activity at 8 other related enzymes. Inhibits clot lysis with no effect on clot formation. Also decreases viability of MDA-MB231 breast cancer cells in vitro.

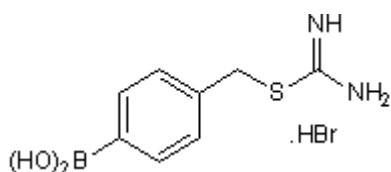
**Physical and Chemical Properties:**

Batch Molecular Formula:  $C_8H_{11}BN_2O_2S.HBr$

Batch Molecular Weight: 290.97

Physical Appearance: White solid

**Batch Molecular Structure:**



**Storage:** Store at  $-20^{\circ}C$

**Solubility & Usage Info:**

DMSO to 100 mM

water to 20 mM with gentle warming

This product should not be dissolved in ethanol as it may decompose.

**Stability and Solubility Advice:**

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a  $45-60^{\circ}C$  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  $-20^{\circ}C$  or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

**References:**

**Smith et al** (2011) Elucidating novel urokinase-type plasminogen activator inhibitors. *Int.Soc.Thromb.Haemost.* (Abstract) **9** 819.

**Longo et al** (2015) Cytotoxicity of the Urokinase-Plasminogen Activator Inhibitor Carbamimidothioic Acid (4-Boronophenyl) Methyl Ester Hydrobromide (BC-11) on Triple-Negative MDA-MB231 Breast Cancer Cells *Molecules* **20** 9879. PMID: 26029857.

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