# **Screening Libraries**

## **Product** Data Sheet

# **BC-11** hydrobromide

Cat. No.: HY-108447 CAS No.: 443776-49-6 Molecular Formula:  $C_8H_{12}BBrN_2O_2S$ 

Molecular Weight: 290.97

Target: Ser/Thr Protease; SARS-CoV; PAI-1

Pathway: Metabolic Enzyme/Protease; Anti-infection

4°C, sealed storage, away from moisture Storage:

\* In solvent: -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)

$$H_2N$$
  $S$   $H_2$   $H_3$   $H_4$   $H_5$   $H_5$ 

### **SOLVENT & SOLUBILITY**

In Vitro

DMSO: 125 mg/mL (429.60 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	3.4368 mL	17.1839 mL	34.3678 mL
	5 mM	0.6874 mL	3.4368 mL	6.8736 mL
	10 mM	0.3437 mL	1.7184 mL	3.4368 mL

Please refer to the solubility information to select the appropriate solvent.

### **BIOLOGICAL ACTIVITY**

Description BC-11 hydrobromide is a selective TMPRSS2 inhibitor (TMPRSS2 is a key host cellular factor for viral entry and SARS-CoV-2

pathogenesis), and a selective urokinase (uPA) inhibitor (IC<sub>50</sub>=8.2 μM). BC-11 hydrobromide is cytotoxic to triple-negative

MDA-MB231 breast cancer cells. BC-11 hydrobromide is used in research on viral infections and cancer<sup>[1][2][3]</sup>.

IC50: 8.2  $\mu$ M (uPA)<sup>[3]</sup>. IC<sub>50</sub> & Target

### **REFERENCES**

[1]. Moumbock AFA, et al. BC-11 is a covalent TMPRSS2 fragment inhibitor that impedes SARS-CoV-2 host cell entry. Arch Pharm (Weinheim). 2023 Jan;356(1):e2200371.

[2]. Semina E, et al. Urokinase and urokinase receptor participate in regulation of neuronal migration, axon growth and branching. Eur J Cell Biol. 2016 Sep;95(9):295-310.

[3]. Longo A, et al. 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. 2015 May 28;20(6):9879-89.

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$ 

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