

# Blasticidin S Hydrochloride

Cell Culture Tested

Product Code: TC421

## Product Description:

Molecular Weight: 458.9

Molecular Formula:  $C_{17}H_{26}N_8O_5 \cdot HCl$

CAS No.: 3513-03-9

Synonym: Blasticidin S

Blasticidin S Hydrochloride is an antibiotic that belong to the cytosine amino nucleoside antibiotic group. It is isolated from the bacterial culture broth of *Streptomyces griseochromogenes*. It inhibits protein synthesis in eukaryotic as well as prokaryotic cells by inhibiting peptide bond formation. Blasticidin resistance is conferred by the Blasticidin deaminase resistance gene from *Bacillus cereus* (bsr) or from *Aspergillus terreus*. During cell growth this antibiotic gets converted to the nontoxic deaminohydroxy derivative by converting Blasticidin S to a non-toxic form deaminohydroxy derivative. It also has antifungal property.

In cell culture applications, Blasticidin induces rapid cell dissociation and death in several cell lines. It is used to select transfected cells carrying bsr or BSD resistance genes.

## Directions:

### Preparation instructions:

For cell culture applications, Blasticidin S Hydrochloride solutions can be prepared as per required concentrations in water.

Solutions can be sterilized by filtering through a sterile membrane filter with a porosity of 0.22 microns or less.

## Quality Control:

### Appearance

Colorless and white to off-white crystals or powder.

### Assay (HPLC)

NLT 98.00%

### Antibiotic sensitivity

Complies

### Cell Culture Test

Passes

## Storage and Shelf Life:

Store powder at 2 - 8°C in air tight containers and away from bright light.

Shelf life is 36 months.

Use before expiry date given on the product label.

## Disclaimer :

Revision : 03 / 2024

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