

Blasticidin S HCl

Molecular structure

Product Description

Blasticidin S HCl is a nucleoside antibiotic isolated from Streptomyces griseochromogenes which inhibits protein synthesis in both prokaryotic and eukaryotic cells (Takeuchi et al., 1958; Yamaguchi et al., 1965). Resistance is conferred by expression of either one of two Blasticidin S deaminase genes: BSD from Aspergillus terreus (Kimura e al., 1994) or bsr from Bacillus cereus (Izumi et al., 1991). These deaminases convert Blasticidin S to a nontoxic deaminohydroxy derivative (Izumi et al., 1991).

Product Specification

Mode of Action: inhibits protein synthesis in prokaryotic and eukaryotic cells by binding to

the ribosomal P-site which strengthens tRNA binding and slows down and

prevents subsequent peptide synthesis.

Conferred Resistance: Resistance to blasticidin S is conferred by bsr, BSD, and bls resistance

genes isolated from Bacillus cereus K55-S1, Aspergillus terreus, and

Streptoverticillum spp, respectively.

Molecular weight: 458.9

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

Appearance: White crystalline powder

Working Concentration: 2 to 20 μg/ml depending on the cell line

Storage and Stability: Frozen - 25°C to -15°C

Protect from light



Ordering information

Cat. No.	Description	Unit Size	Qty/Pk
30-100-RB	Blasticidin S HCl powder	1 mg	1

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Support

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