

Blasticidine S hydrochloride

MG2506

Technical literature is available at: www.mesgenbio.com. E-mail MesGen Technical Services if you have questions on use of this system: tech@mesgenbio.com

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Description

Blasticidin S is used as a selection agent for transformed cells that contain the resistance genes bls, bsr, or BSD. Blasticidin S has been used to select HEK293-T cells with TLR-2 constructs and HEK-D5 cells. It is also used to study protein synthesis at the level of peptide bond formation. Blasticidin S belongs to the aminoacylnucleoside class of antibiotics. It inhibits protein synthesis in bacteria and eukaryotes. It also has fungicidal properties and prevents rice blast disease.

Selection condition

- *Escherichia coli*

E. coli is poorly sensitive to blasticidin, but transformants resistant to blasticidin can be selected on low salt LB agar medium (pH 8) supplemented with 100 µg/ml blasticidin. High pH enhances the activity of blasticidin.

- Mammalian cells

The working concentration of blasticidin for mammalian cell lines varies from 1 to 10 µg/ml, in a few cases up to 30 µg/ml. In a starting experiment we recommend to determine optimal concentrations of antibiotic required to kill your host cell line. After treatment, cell death occurs rapidly, allowing the selection of transfected cells with plasmids carrying the *bsr* or *BSD* genes in as little as 7 days post-transfection. Suggested concentrations of blasticidin for selection in some examples of mammalian cells are listed below.

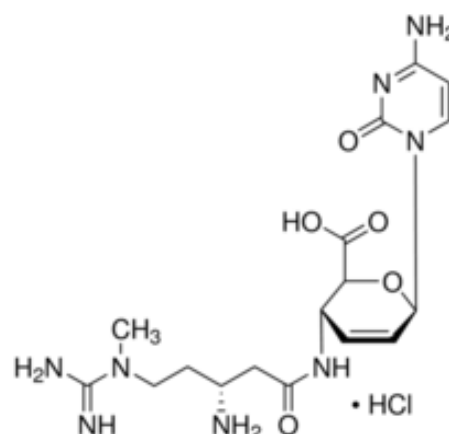
Solubility

Water: >10mg/ml, soluble clear, colorless

Storage condition

-20°C

CAS : 3513-03-9	MDL number : MFCD02091640
Molecular weight : 458.90	Molecular formula : C ₁₇ H ₂₆ N ₈ O ₅ .HCl
Synonym: Blasticidin S	HPLC>95%



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