

90 × 210mm サイズ

< for Research Use Only >

Code No. 026-18711 (1 mL)  
022-18713 (1 mL × 10)

**Wako**

**10mg/mL Blasticidin S Hydrochloride,  
HEPES Solution**  
**10mg/mL プラストサイジンS塩酸塩・  
HEPES溶液**

Blasticidin S hydrochloride is a nucleoside antibiotic which inhibits protein synthesis in both prokaryotes and eukaryotes. The resistance is conferred by expression of either *BSD* or *bsr*, Blasticidin S deaminase genes that convert Blasticidin S to a non-toxic deaminohydroxy derivatives.

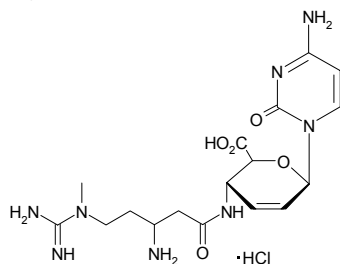
Blasticidin S hydrochloride is used to select transfected cells carrying *BSD* or *bsr* resistance genes.

**Molecular formula** : C<sub>17</sub>H<sub>26</sub>N<sub>8</sub>O<sub>5</sub> · HCl

**Molecular weight** : 458.90

**CAS No.** 3513-03-9

**Structure** :



**Formulation** : 10 mg/mL Blasticidin S in 20 mmol/L HEPES, pH 7.5.

**Source** : *Streptomyces griseochromogenes*

**Resistance gene** : *BSD* (from *Aspergillus terreus*)  
*bsr* (from *Bacillus cereus*)

**Using for Selection** :

[Selection in *E. coli*]

Use Low Salt LB medium containing 50-100 μg/mL Blasticidin S.

Preparation of Low Salt LB medium :

Combine Tryptone 10 g, NaCl 5 g and Yeast Extract 5 g and add deionized-distilled water to 950 mL. Adjust pH to 7.0 with 1N NaOH and bring up to 1 liter. For plates, add 15 g/L agarose before autoclaving.

Autoclave at 121 °C for 20 minutes.

Allow the medium to cool to at least 55 °C before adding Blasticidin S to 50-100 μg/mL final concentration.

Store unused medium and plates at 4 °C in the dark.

[Selection in mammalian cell lines]

2-10 μg/mL Blasticidin S.

The concentration of Blasticidin S required for selection in mammalian cells can vary depending on the cell type and the cell line used.

Please optimize the most appropriate concentration.

**[Precaution for use]**

- Do not subject stock solution to freeze-thaw cycles.
- Do not store in a frost-free freezer.
- Medium containing Blasticidin S may be stored at 4 °C for up to approx. 2 weeks.

**[Expiration date]** Indicated on the label.

**[Storage]** Store at -20 °C in the dark.

**[Package]**

Code No.	Packaging
026-18711	1 mL
022-18713	1 mL × 10

**[Reference]**

Takeuchi, S., Hirayama, K., Ueda, K., Sakai, H. and Yonehara, H., *J. Antibiot. (Tokyo)*, **11**(1), 1-5(1958).

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