

PRODUCT DATA SHEET

Code No.: BIA-B1426

Pack sizes: 1 mg, 5 mg

Blasticidin S hydrochloride

Synonyms :

Specifications

CAS # : **3513-03-9**Molecular Formula : **C**₁₇**H**₂₇**CIN**₈**O**₅

Molecular Weight : 458.9

Source : Streptomyces sp.

Appearance : White solid

Purity : >95% by HPLC

Long Term Storage : -20°C

Solubility : Soluble in ethanol, methanol, DMF or DMSO. Good water solubility.

Application Notes

Blasticidin S hydrochloride is a salt of blasticidin S, an amphoteric nucleoside produced by several species of Streptomyces, first reported in the late 1950s. Blasticidin S hydrochloride was originally isolated by acetone precipitation. For historical reasons only the salt has been routinely available to researchers. Both the salt and free base are freely water soluble. Blasticidin S is an antifungal agent with particularly potent activity against the rice pathogen, Piricularia oryzae, for which it was used commercially for some time in Japan. Blasticidin S inhibits protein synthesis and is active against bacteria, tumor cell lines and nematodes. More recently, blasticidin S has been used as a marker for strain manipulations.

References

- 1. Blasticidin S, a new antibiotic. Takeuchi S. et al., J. Antibiot. 1958, 11, 1.
- 2. Nucleoside antibiotics. Suhadolnik R.J. pub. Wily-Interscience 1970, 298.
- 3. Blasticidin S-resistance gene (bsr): a novel selectable marker for mammalian cells. Izumi M. et al., Exp. Cell Res. 1991, 197, 229.

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