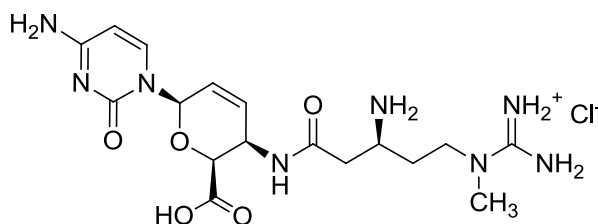


Blasticidin S hydrochloride

Code No.: **BIA-B1426**

Pack sizes: **1 mg, 5 mg**



Synonyms :

Specifications

CAS #	: 3513-03-9
Molecular Formula	: $C_{17}H_{27}ClN_8O_5$
Molecular Weight	: 458.9
Source	: <i>Streptomyces</i> sp.
Appearance	: White solid
Purity	: >98% 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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