

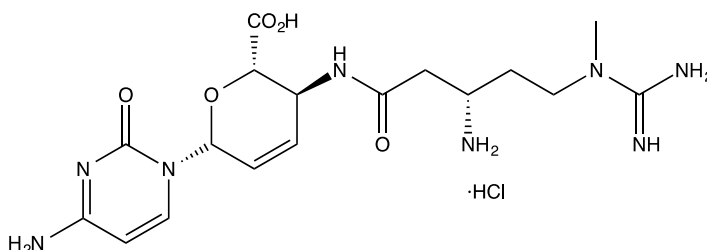
**Catalog # 10-2830**

**Blasticidin S HCl**

CAS# 3513-03-9

(S)-4-[[[3-Amino-5-[(aminoiminomethyl)methylamino]-1-oxopentyl]amino]-1-(4-amino-2-oxo-1(2H)-pyrimidinyl)-1,2,3,4-tetrahydro-β-D-erythro-hex-2-enopyranuronic acid hydrochloride salt

Lot # X106534



A peptidyl nucleoside antibiotic inhibiting protein synthesis in bacteria and eukaryotes.<sup>1</sup> Inhibits translation by trapping deformed tRNA on the ribosome.<sup>1</sup> The ABC-type transporter NppA1A2BCD is required for uptake of blasticidin S and other peptidyl nucleoside antibiotics in *Pseudomonas aeruginosa* PA14.<sup>2</sup> Selection agent for bis, bsr and bsd transformed cells.<sup>3,4</sup>

- 1) Svidritskiy *et al.*, (2013), *Blasticidin S inhibits translation by trapping deformed tRNA on the ribosome* Proc.Natl.Acad.Sci. USA **110** 12283
- 2) Pletzer *et al.* (2015), *The Pseudomonas aeruginosa PA14 ABC Transporter NppA1A2BCD is Required for Uptake of Peptidyl Nucleoside Antibiotics*; J.Bacteriol. **197** 2217
- 3) Asada *et al.* (2015), *Transfection of Babesia bovis by Double Selection with WR99210 and Blasticidin-S and Its Application for Functional Analysis of Thioredoxin Peroxidase-1*; PLoS One **10** e0125993
- 4) Garg and Qadri (2010), *Hemoglobin transforms anti-inflammatory Salmonella typhi virulence polysaccharide into a TLR-2 agonist*; J.Immunol. **184** 5980

**PHYSICAL DATA**

Molecular Weight:	458.90
Molecular Formula:	C <sub>17</sub> H <sub>26</sub> N <sub>8</sub> O <sub>5</sub> ·HCl
Purity:	>99% by HPLC
	NMR: (Conforms)
Solubility:	Soluble in Water (>25 mg/mL)
Physical Description:	White solid
Storage and Stability:	Store as supplied at -20°C for up to 1 year from the date of purchase. Store solutions at -20°C for up to 1 month.

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