

# PRODUCT INFORMATION



## Blasticidin A

Item No. 25519

**CAS Registry No.:** 100513-53-9  
**Formal Name:** 1-methyl-3Z-[(2E,4S,6R,8R,9R,10S,11R,13S,14S,15R,16S,17R,19R,21S,23S,25S,26S,27R,28R,29S)-1,8,9,11,13,15,17,19,21,23,25,26,27,28,29-pentadecahydroxy-2,4,6,10,14,16-hexamethyl-30-[(2R,3S,4S,5S,6S)-tetrahydro-3,4,5,6-tetrahydroxy-6-[(2R)-2-hydroxydodecyl]-2H-pyran-2-yl]-2-triaconten-1-ylidene]-2,4-pyrrolidinedione

**Synonym:**

(+)-Blasticidin A

**MF:** C<sub>58</sub>H<sub>107</sub>NO<sub>23</sub>

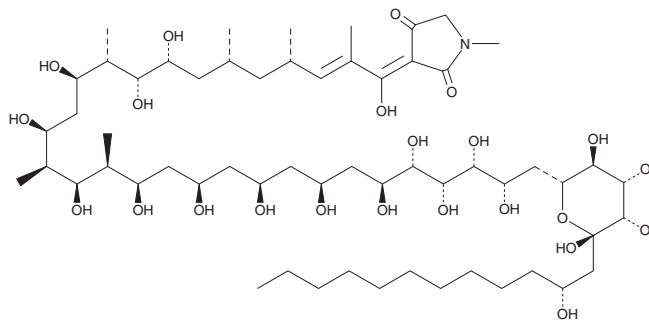
**FW:** 1,186.5

**Purity:** ≥95%

**Supplied as:** A solid

**Storage:** -20°C

**Stability:** ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

Blasticidin A is supplied as a solid. A stock solution may be made by dissolving the blasticidin A in the solvent of choice, which should be purged with an inert gas. Blasticidin A is soluble in methanol, DMSO, and dimethyl formamide. It is also slightly soluble in ethanol and water. We do not recommend storing the aqueous solution for more than one day.

### Description

Blasticidin A is a bacterial metabolite originally isolated from *S. resistomycificus* strain 2A-327.<sup>1</sup> It inhibits aflatoxin production by *A. parasiticus* without affecting fungal growth (IC<sub>50</sub>s = 0.25 and 1.6 μM, respectively).<sup>2</sup> Blasticidin A also decreases ribosomal protein levels and inhibits protein synthesis in *S. cerevisiae*.

### References

1. Fukunaga, K., Misato, T., Ishii, I., *et al.* Blasticidin, a new anti-phytopathogenic fungal substance. Part I. *Bull. Agri. Chem. Soc. Japan* **19(3)**, 181-188 (1955).
2. Yoshinari, T., Noda, Y., Sezaki, H., *et al.* Inhibitory activity of blasticidin A, a strong aflatoxin production inhibitor, on protein synthesis of yeast: Selective inhibition of aflatoxin production by protein synthesis inhibitors. *J. Antibiot. (Tokyo)* **63(6)**, 309-314 (2010).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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