

Product Name:	Blasticidin A
Product Number:	B051
CAS Number:	100513-53-9
Molecular Formula:	C ₅₈ H ₁₀₇ NO ₂₃
Molecular Weight:	1186.5
Appearance:	Yellow tan solid
Solubility:	soluble in DMF, DMSO and methanol and is moderately soluble in water and ethanol.
Storage Conditions:	-20°C
Description:	<p>Blasticidin A is a high molecular weight tetramic acid isolated from <i>S. resistomycificus</i> in 1955. It has broad-spectrum antifungal and antibacterial activity. Like many tetramic acids, Blasticidin A is isolated as the stable calcium salt/complex. Blasticidin A and closely related Aflastatin A are specific inhibitors of the production of the aflatoxin produced by the fungus <i>Aspergillus parasiticus</i>.</p> <p>Blasticidin A is soluble in DMF, DMSO and methanol and is moderately soluble in water and ethanol.</p>
Mechanism of Action:	Blasticidin A inhibits aflatoxin production by <i>Aspergillus parasiticus</i> . It also decreases ribosomal protein levels and inhibits protein synthesis in <i>S. cerevisiae</i> .
Microbiology Applications	Blasticidin A has antifungal and antibacterial activity. It inhibits aflatoxin production in <i>Aspergillus parasiticus</i> without affecting fungal growth.
References:	<p>Fukunaga K et al (1955) Blasticidin, a new anti-phytopathogenic fungal substance. Part I. Bull. Agr. Chem. Soc. Jpn. 1955, 19(3): 181-188</p> <p>Sakuda S et al (2000) Blasticidin A as an Inhibitor of Aflatoxin Production by <i>Aspergillus parasiticus</i>. J. Antibiot. (Tokyo) 53 (11): 1265-1271. PMID 11213287</p> <p>Yoshinari T et al (2010) 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 PMID 20414321</p>