

Product Name:	Tyrocidine
Product Number:	T105
CAS Number:	8011-61-8
Molecular Formula:	C ₆₆ H ₈₇ N ₁₃ O ₁₃ (for Tyrocidine A)
Molecular Weight:	1269.7
Appearance:	White solid
Storage Conditions:	-20°C
Description:	Tyrocidine is a family of eight cationic cyclic decapeptides produced by <i>Bacillus brevis</i> , first reported by Dubos in 1941. Tyrocidines exhibit broad antibiotic activity against Gram positive and negative bacteria and are the major component of the tyrothricin complex which is used for treatment of topical infections.
Mechanism of Action:	The mechanism of action of tyrocidines is not fully understood; however, they are known to act by disturbing lipid bilayers of the bacterial cell membrane.
References:	<p>Studies on a bacterial agent extracted from a soil bacillus. Dubos R.J. J. Exp. Med. 1939, 70, 11.</p> <p>The amino-acid composition of tyrocidine. Gordon A.H. et al. Biochem. J. 1943, 37, 313.</p> <p>The lytic action of tyrothricin and its derivatives on <i>Staphylococcus aureus</i>. Fong J. & Krueger A.P. J. Gen. Physiol. 1950, 33, 311.</p> <p>Interaction between the antibiotic tyrocidine and DNA in vitro. Schazschneider B. et al. Nature 1974, 249, 757.</p>