

Product Name:	Enramycin
Product Number:	E006
CAS Number:	11115-82-5
Molecular Formula:	Enramycin A: $C_{107}H_{138}Cl_2N_{26}O_{31}$ Enramycin B: $C_{108}H_{140}Cl_2N_{26}O_{31}$
Molecular Weight:	Enramycin A: 2550.21 Enramycin B: 2564.24
Form:	Powder
Appearance:	light tan powder
Solubility:	Acids (Dilute HCl): Freely soluble Dimethylformamide: Freely soluble Water: Slightly soluble
Source:	<i>Streptomyces fungicidus</i>
Storage Conditions:	-20°C
Description:	<p>Enramycin is a polypeptide antibiotic produced by <i>Streptomyces fungicidus</i> and developed as a food additive in Japan. Enramycin is composed of two different compounds: Enramycin A Enramycin B. The ratios of A and B varies but is typically ~70:30. Enramycin is slightly soluble in water and freely soluble in dilute HCl solution.</p> <p>TOKU-E offers three forms of Enramycin:</p> <ul style="list-style-type: none">• Enramycin (E006)• Enramycin A, EvoPure® (E018)• Enramycin B, EvoPure® (E019)
Mechanism of Action:	Enramycin acts as a MurG inhibitor involved peptidoglycan synthesis in Gram-positive bacteria. MurG catalyzes the transglycosylation reaction in the last step of peptidoglycan biosynthesis. Inhibition of this step greatly compromises cell wall integrity leading to cell lysis.
Spectrum:	Enramycin has a strong antibacterial activity against Gram-positive bacteria and inhibits development of major gut flora pathogens. Resistance or cross-resistance with existing antibiotics has rarely been observed.
References:	Fang X et al (2006) The mechanism of action of Ramoplanin and Enduracidin. Royal Soc. Chem. 2: 69-76 PMID 16880924