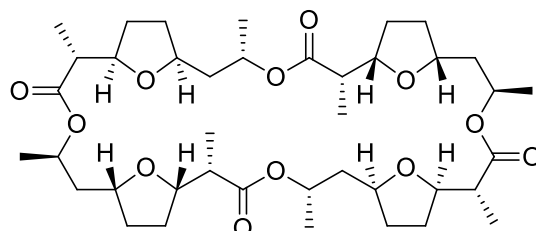


Nonactin

Code No.: **BIA-N1270**

Pack sizes: **1 mg, 5 mg**



Synonyms : Werramycin, FH 3582A, NSC 52141, AKD 1A, KD 1A

Specifications

CAS #	: 6833-84-7
Molecular Formula	: C₄₀H₆₄O₁₂
Molecular Weight	: 736.9
Source	: <i>Streptomyces griseus</i>
Appearance	: White solid
Purity	: >95% by HPLC
Long Term Storage	: -20°C
Solubility	: Soluble in ethanol, methanol, DMF or DMSO. Poor water solubility.

Application Notes

Nonactin is the smallest member of the macrotetrolide complex produced by a range of *Streptomyces* species. Originally the name, nonactin, reflected the lack of biological activity. The literature is confusing in this respect, as virtually all sources of nonactin are contaminated with small amounts of the much more active monactin. The BioAustralis nonactin has been purified to remove traces of other biologically-active macrotetrolides. Like the other macrotetrolides, nonactin is a monovalent cation ionophore with high selectivity for ammonium and potassium.

References

1. Über Untersuchungen, welche zur Bestimmung der Konfiguration der Nonactinsäure und der Homononactinsäure ausgeführt wurden, werden wir in einer späteren Mitteilung berichten. Dominguez J. et al., *Helv. Chim. Acta* 1962, 45, 129.
2. Antibiotics as tools for metabolic studies. VI. Damped oscillatory swelling of mitochondria induced by nonactin, monactin, dinactin, and trinactin. Graven S. N. et al., *Biochemistry*, 1966, 5, 1735.