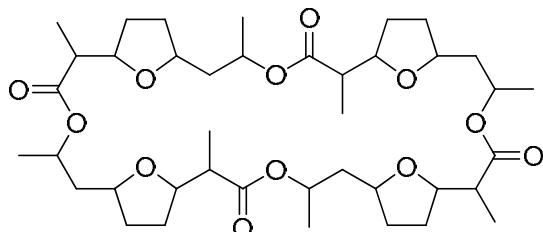


## Nonactin

Code: **BIA-N1270**Pack sizes: **1 mg, 5 mg**

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

### Specifications

CAS #	: <b>6833-84-7</b>
Molecular Formula	: <b>C<sub>40</sub>H<sub>64</sub>O<sub>12</sub></b>
Molecular Weight	: <b>736.9</b>
Source	: <b>Streptomyces griseus</b>
Appearance	: <b>White solid</b>
Purity	: <b>99% (No other macrotetrolides present)</b>
Storage	: <b>-20°C</b>
Solubility	: <b>Soluble in ethanol, methanol, DMF or DMSO. Very poor water solubility.</b>

### 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 somewhat 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.