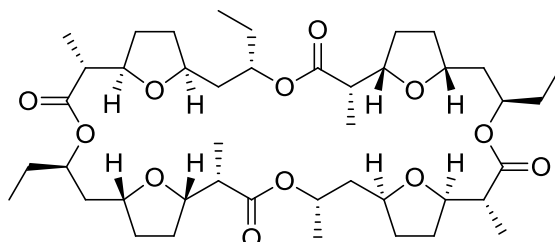


Trinactin

Code No.: **BIA-T1094**

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



Synonyms : AKD-1D, S 3466B

Specifications

CAS #	: 7561-71-9
Molecular Formula	: $C_{43}H_{70}O_{12}$
Molecular Weight	: 779.0
Source	: <i>Streptomyces</i> sp.
Appearance	: Colourless Film
Purity	: >95% by HPLC
Long Term Storage	: -20°C
Solubility	: Soluble in ethanol, methanol, DMF or DMSO. Limited water solubility.

Application Notes

Trinactin is a member of the macrotetrolide complex produced by a range of *Streptomyces* sp. Early literature reported that trinactin was a monovalent cation ionophore with high selectivity for ammonium and potassium. Trinactin inhibits T-cell proliferation induced by IL-2, and cytokine production at nanomolar levels for IL-2, IL-4, IL-5 and interferon- γ . Trinactin has not previously been available for intensive investigation.

References

1. Effects of cyclosporin A and dinactin on T-cell proliferation, interleukin-5 production, and murine pulmonary inflammation. Umland S. P., et al., *Am. J. Respir. Cell Mol. Biol.*, 1999, 20, 481.
2. Immunosuppressive effects of polynactins (tetranactin, trinactin and dinactin) on experimental autoimmune uveoretinitis in rats. Tanouchi Y., et al., *Jpn. J. Ophthalmol.*, 1987, 31, 218.
3. 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.