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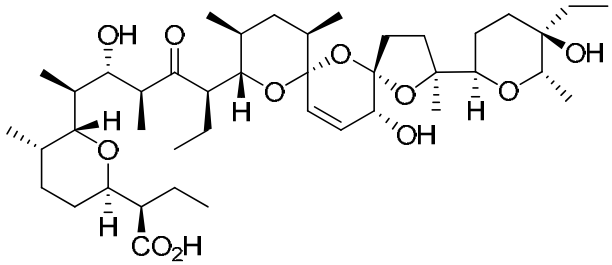
PRODUCT DATA SHEET

Salinomycin

Code: **BIA-S1307**

Pack sizes: **5 mg, 25 mg**



Synonyms : **AHR 3096, K 364, Antibiotic 61477**

Specifications

CAS #	:	**53003-10-4**
Molecular Formula	:	**$C_{42}H_{70}O_{11}$**
Molecular Weight	:	**751.0**
Source	:	**Streptomyces sp.**
Appearance	:	**White solid**
Purity	:	**>95%**
Storage	:	**-20°C**
Solubility	:	**Soluble in ethanol, methanol, DMF or DMSO. Limited water solubility.**

Application Notes

Salinomycin is a polyether ionophore with broad spectrum Gram +ve and anti-coccidial activity. Salinomycin has a high affinity for monovalent cations, particularly potassium. Salinomycin is used in animal health for control of coccidia and for growth promotion in ruminants. Recently, salinomycin has been shown to inhibit cancer stem cells and is > 100 times more potent than taxol. While the mechanism of action is unknown, it was noted that among the 60,000 compounds screened, another monovalent ionophore, nigericin, and a chloride channel inhibitor, avermectin, were also active.

References

1. Salinomycin, a new polyether antibiotic. Miyazaki Y. et al. J. Antibiot. 1974, 27, 814.
2. The structure of salinomycin, a new member of the polyether antibiotics. Kinashi H. Tetrahed. Lett. 1973, 49, 4955.
3. Identification of selective inhibitors of cancer stem cells by high-throughput screening. Gupta P. B. et al. Cell 2009, 138, 645.

Building C, 28-54 Percival Road, Smithfield NSW 2164, AUSTRALIA
Tel: 61 2 9757 4515 Fax: 61 2 9757 2586 Web: www.bioaustralis.com Email: info@bioaustralis.com