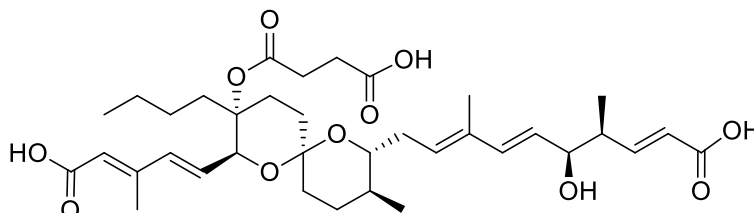


## Reveromycin A

Code No.: **BIA-R1078**

Pack sizes: **0.25 mg, 1 mg**



Synonyms :

### Specifications

CAS #	: 134615-37-5
Molecular Formula	: C <sub>36</sub> H <sub>52</sub> O <sub>11</sub>
Molecular Weight	: 660.8
Source	: <i>Streptomyces</i> sp.
Appearance	: Tan Lyophilisate
Purity	: >95% by HPLC
Long Term Storage	: -20°C
Solubility	: Soluble in ethanol, methanol, DMF or DMSO. Poor water solubility.

### Application Notes

Reveromycin A, the dominant analogue of a complex of spiroketals isolated from a *Streptomyces* sp., is an inhibitor of the mitogenic activity of EGF. Reveromycin A is a G1 phase cell cycle inhibitor, selectively inhibiting isoleucyl-tRNA synthetase. Reveromycin A displays antiproliferative behaviour against human cell lines KB and K562, as well as potent antifungal activity. More recently it has been shown to induce apoptosis in osteoclasts thus inhibiting bone resorption.

### References

1. Reveromycin A, an agent for osteoporosis, inhibits bone resorption by inducing apoptosis specifically in osteoclasts. Woo J.T. et al., Proc Natl Acad Sci USA. 2006, 103, 4729.
2. Reveromycin A inhibits osteolytic bone metastasis of small-cell lung cancer cells, SBC-5, through an antiosteoclastic activity. Muguruma H. et al., Clin Cancer Res. 2005, 11, 8822.
3. Identification of *Saccharomyces cerevisiae* isoleucyl-tRNA synthetase as a target of the G1-specific inhibitor Reveromycin A. Miyamoto Y., et al., J. Biol. Chem., 2002, 277, 28810.
4. Reveromycins, new inhibitors of eukaryotic cell growth. II. Biological activities. Takahashi H., et al., J. Antibiot., 1992, 45, 1414.