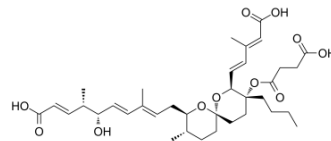


Reveromycin A

Cat. No.:	HY-129337
CAS No.:	134615-37-5
Molecular Formula:	C ₃₆ H ₅₂ O ₁₁
Molecular Weight:	660.79
Target:	Antibiotic; Fungal; Apoptosis
Pathway:	Anti-infection; Apoptosis
Storage:	Please store the product under the recommended conditions in the COA.



BIOLOGICAL ACTIVITY

Description	Reveromycin A, a benzoquinoid antibiotic isolated from the genus <i>Streptomyces</i> , is a selective inhibitor of protein synthesis in eukaryotic cells. Reveromycin A inhibits bone resorption by inducing apoptosis specifically in osteoclasts. Reveromycin A has antiproliferative activity against tumor cell lines and antifungal activity ^{[1][2]} .
In Vitro	Reveromycin A inhibits protein synthesis in osteoclasts (OCs) by selectively blocking enzymatic activity of isoleucyl-tRNA synthetase ^[2] . Reveromycin A (0.3-30 μM; for 24 h) induces apoptosis in OCs through inhibition of protein synthesis ^[2] .
In Vivo	Reveromycin A (20 mg/kg; twice daily; i.v.; for 3 days) significantly decreases numbers of OCs without affecting numbers of osteoblasts in normal 4-week-old male Sprague-Dawley rats ^[2] .

REFERENCES

- [1]. H Takahashi , et al. Reveromycins, new inhibitors of eukaryotic cell growth. II. Biological activities. *J Antibiot (Tokyo)*. 1992 Sep;45(9):1414-9.
- [2]. Je-Tae Woo, et al. Reveromycin A, an agent for osteoporosis, inhibits bone resorption by inducing apoptosis specifically in osteoclasts. *Proc Natl Acad Sci U S A*. 2006 Mar 21;103(12):4729-34.

Caution: Product has not been fully validated for medical applications. For research use only.

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