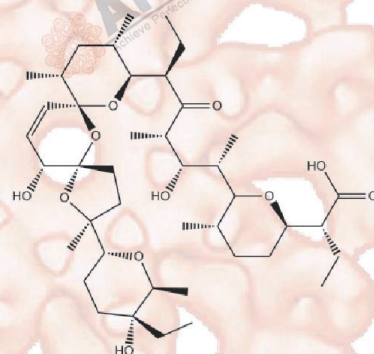


Product Data Sheet

Salinomycin

Cat. No.: A3785
CAS No.: 53003-10-4
Formula: C₄₂H₇₀O₁₁
M.Wt: 751
Synonyms: Procoxacin
Target: Stem Cell
Pathway: Wnt/β-catenin
Storage: Store at -20°C



Solvent & Solubility

insoluble in H₂O; ≥142.2 mg/mL in EtOH; ≥91.8 mg/mL in DMSO

In Vitro

	Solvent	Mass Concentration	1mg	5mg	10mg
Preparing Stock Solutions		1 mM	1.3316 mL	6.6578 mL	13.3156 mL
		5 mM	0.2663 mL	1.3316 mL	2.6631 mL
		10 mM	0.1332 mL	0.6658 mL	1.3316 mL

Please refer to the solubility information to select the appropriate solvent

Biological Activity

Shortsummary

Polyether ionophore antibiotic; anti-cancer

IC₅₀ & Target

In Vitro

Cell Viability Assay

Cell Line:	HCC cell lines HepG2, SMMC-7721 and BEL-7402
Preparation method:	The solubility of this compound in DMSO is <1.9mg/mL. General tips for obtaining a higher concentration: Please warm the tube at 37 °C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below - 20 °C for several months.
Reacting conditions:	0 ~ 25 μM

In Vivo	Applications:	In HCC cells, Salinomycin inhibited cell proliferation, down-regulated PCNA level as well as decreased the proportion of HCC CD133+ cell subpopulations. Salinomycin also induced cell cycle arrest and apoptosis. Compared to the control group, Salinomycin significantly down-regulated β -catenin expression, and increased intracellular Ca^{2+} concentrations.
	Animal experiment	
	Animal models:	Nude mice bearing HepG2 cells
	Dosage form:	4 and 8 mg/kg; i.p.; q.d., for 6 weeks
	Applications:	In nude mice bearing HepG2 cells, Salinomycin reduced the size of liver tumors. The results of immunohistochemistry and TUNEL staining also showed that Salinomycin inhibited cell proliferation and induced apoptosis in vivo. Further study implied that the anti-tumor effects of Salinomycin were achieved by increasing intracellular Ca^{2+} levels, and subsequently inhibiting Wnt/ β -catenin signaling.
	Other notes:	Please test the solubility of all compounds indoor, and the actual solubility may slightly differ with the theoretical value. This is caused by an experimental system error and it is normal.

Product Citations

See more customer validations on www.apexbt.com.

References

[1]. Wang F, He L, Dai WQ, Xu YP, Wu D, Lin CL, Wu SM, Cheng P, Zhang Y, Shen M, Wang CF, Lu J, Zhou YQ, Xu XF, Xu L, Guo CY. Salinomycin inhibits proliferation and induces apoptosis of human hepatocellular carcinoma cells in vitro and in vivo. *PLoS One*. 2012;7(12):e50638.

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most APEX-BIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Short-term storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.



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