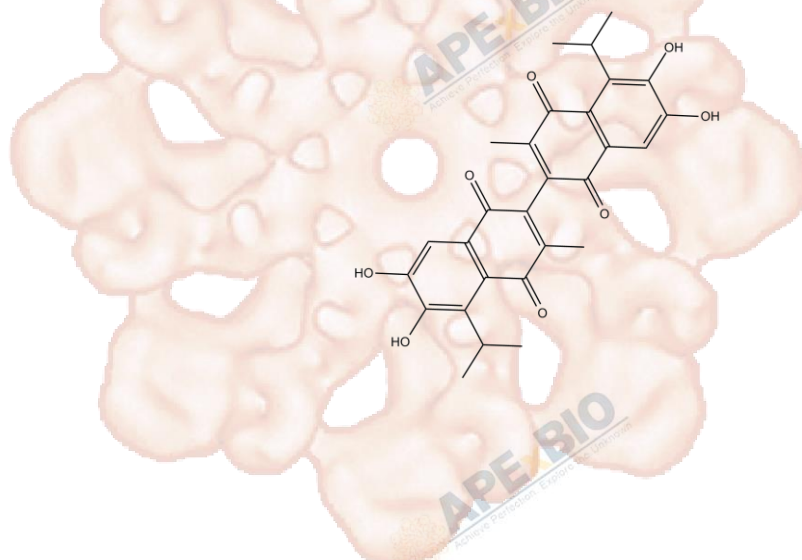


Product Data Sheet

Apogossypolone (ApoG2)

Cat. No.:	A4200
CAS No.:	886578-07-0
Formula:	C ₂₈ H ₂₆ O ₈
M.Wt:	490.5
Synonyms:	
Target:	Apoptosis
Pathway:	Bcl-2 Family
Storage:	Store at -20°C



Solvent & Solubility

≥24.55 mg/mL in DMSO; insoluble in H₂O; ≥51.2 mg/mL in EtOH with ultrasonic

In Vitro

Preparing Stock Solutions	Solvent	Mass		
		1mg	5mg	10mg
	Concentration			
	1 mM	2.0387 mL	10.1937 mL	20.3874 mL
	5 mM	0.4077 mL	2.0387 mL	4.0775 mL
	10 mM	0.2039 mL	1.0194 mL	2.0387 mL

Please refer to the solubility information to select the appropriate solvent.

Biological Activity

Shortsummary

Bcl-2 inhibitor, nonpeptidic small molecule

IC₅₀ & Target

In Vitro

Cell Viability Assay

Cell Line:	human prostate cancer cell lines PC-3 and LNCaP
Preparation method:	The solubility of this compound in DMSO is > 10 mM. 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:	24-96 h, 5-20 mg/L

	Applications:	Apogossypolone is a novel inhibitor of Bcl-2 family proteins. Apogossypolone inhibited PC-3 and LNCaP cell growth in a dose-dependent manner. Treating PC-3 and LNCaP cells with apogossypolone induced autophagy, for the appearance of membranous vacuoles in the cytoplasm and the formation of acidic vesicular organelles. Expression of autophagy-associated beclin-1 and LC3-II were also increased in both cell lines after apogossypolone treatment.
In Vivo	Animal experiment	
	Animal models:	Male 4-week-old Balb/c nu/nu mice
	Dosage form:	2.5, 5, 10 mg/kg, intraperitoneal administration daily for 10 days.
	Applications:	Apogossypolone can significantly inhibit the growth of subcutaneous prostatic carcinoma implant. Apogossypolone decreased the expression of PCNA and CD31, enhanced the expression of caspases-3, caspase-8 in tumor tissues, indicating an induction of apoptosis and inhibition of tumor proliferation and angiogenesis.
	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

1. Lin D, Wang X, et al. "Apogossypolone acts as a metastasis inhibitor via up-regulation of E-cadherin dependent on the GSK-3/AKT complex." Am J Transl Res. 2019 Jan 15;11(1):218-232.PMID:30787981
2. Lin D, Li X, et al. "Apogossypolone (ApoG2) induces ROS-dependent apoptosis and reduces invasiveness of PC12 cells in vitro and in vivo." Am J Transl Res. 2017 Sep 15;9(9):3990-4002. eCollection 2017.PMID:28979675

See more customer validations on www.apexbt.com.

References

- [1]. Zhang X Q, Huang X F, Hu X B, et al. Apogossypolone, a novel inhibitor of antiapoptotic Bcl-2 family proteins, induces autophagy of PC-3 and LNCaP prostate cancer cells in vitro[J]. Asian journal of andrology, 2010, 12(5): 697.
- [2]. Xianqing Z, Xiaofeng H, Shijie M, et al. Inhibitory effect of a new gossypol derivative apogossypolone (ApoG2) on xenograft of human prostate cancer cell line PC-3[J]. Journal of Medical Colleges of PLA, 2009, 24(5): 274-282.

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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