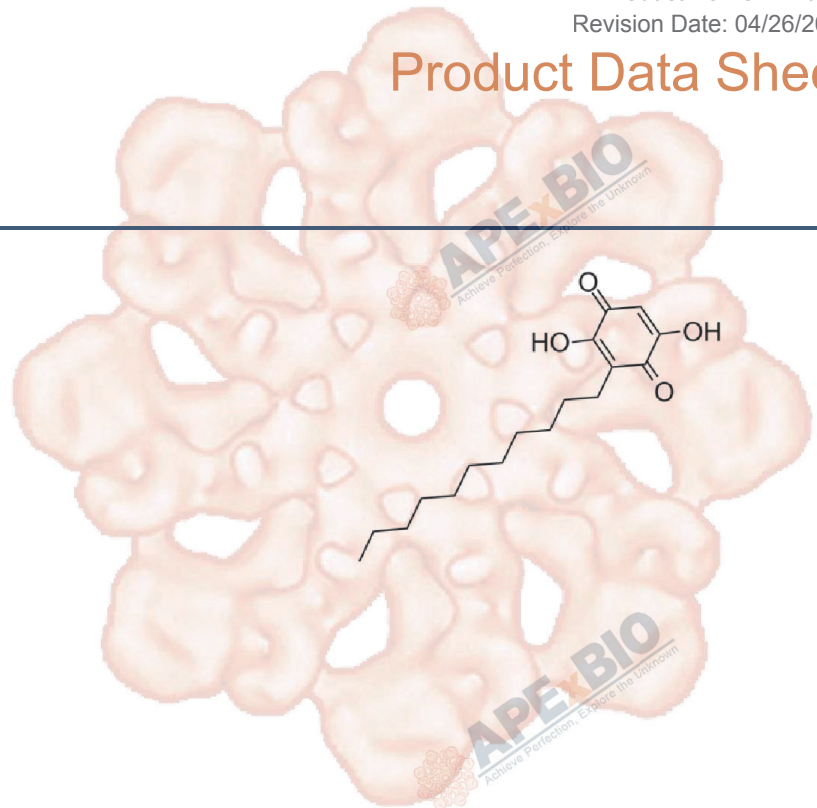


Product Data Sheet

Embelin

Cat. No.:	A8235
CAS No.:	550-24-3
Formula:	C17H26O4
M.Wt:	294.39
Synonyms:	
Target:	Apoptosis
Pathway:	IAP
Storage:	Store at 4°C



Solvent & Solubility

insoluble in H₂O; ≥4.23 mg/mL in EtOH with ultrasonic; ≥9.6 mg/mL in DMSO

In Vitro	Preparing Stock Solutions	Mass			
		Solvent Concentration	1mg	5mg	10mg
		1 mM	3.3969 mL	16.9843 mL	33.9685 mL
		5 mM	0.6794 mL	3.3969 mL	6.7937 mL
		10 mM	0.3397 mL	1.6984 mL	3.3969 mL

Please refer to the solubility information to select the appropriate solvent

Biological Activity

Shortsummary	XIAP inhibitor, cell-permeable	
IC ₅₀ & Target	0.06 μM (5-LO), 0.2 μM (mPGES-1), 4.1 μM (XIAP)	
In Vitro	Cell Viability Assay	
	Cell Line:	PC-3, LNCap, PrEC and WI-38 cells
	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:	1 ~ 64 μM; 4 ~ 5 days

	Applications:	Embelin dose-dependently inhibited cell growth of both PC-3 and LNCap cells, with the IC50 values of 3.7 and 5.7 μ M, respectively. In normal PrEC and WI-38 cells, the toxicity of Embelin was much lower, with the IC50 values of 20.1 μ M and 19.3 μ M, respectively.
In Vivo	Animal experiment	
	Animal models:	AOM/DSS-induced colitis-associated cancer (CAC) model
	Dosage form:	50 mg/kg/day; p.o.
	Applications:	In a CAC model, Embelin reduced both incidence and tumor size in mice by inhibiting proliferation of tumor epithelial cells and suppressing IL6 expression and IL6-activated STAT3.
	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]. Nikolovska-Coleska Z, Xu L, Hu Z, Tomita Y, Li P, Roller PP, et al. Discovery of embelin as a cell-permeable, small-molecular weight inhibitor of XIAP through structure-based computational screening of a traditional herbal medicine three-dimensional structure database. *J Med Chem* 2004,47:2430-2440.
- [2]. Dai Y, Jiao H, Teng G, Wang W, Zhang R, Wang Y, et al. Embelin reduces colitis-associated tumorigenesis through limiting IL-6/STAT3 signaling. *Mol Cancer Ther* 2014,13:1206-1216.

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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