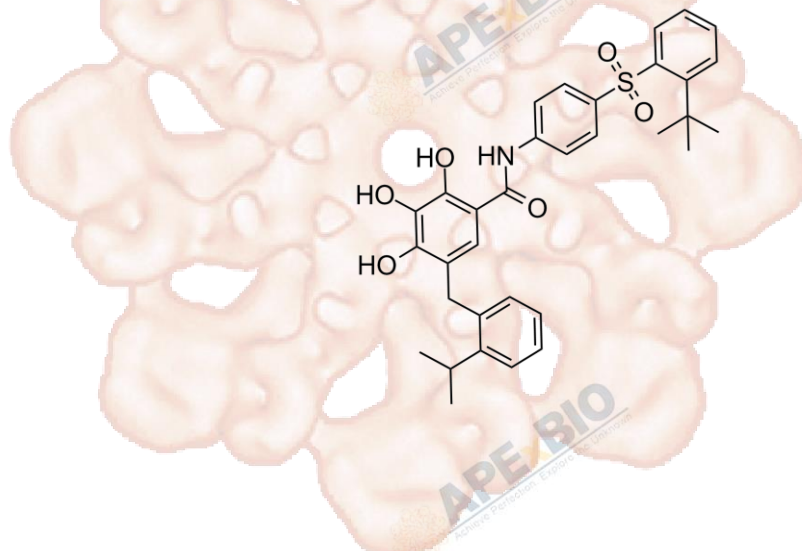


Product Data Sheet

TW-37

Cat. No.:	A4234
CAS No.:	877877-35-5
Formula:	C33H35NO6S
M.Wt:	573.7
Synonyms:	TW37, TW 37
Target:	Apoptosis
Pathway:	Bcl-2 Family
Storage:	Store at -20°C



Solvent & Solubility

insoluble in H₂O; ≥ 19.75 mg/mL in DMSO; ≥ 3.41 mg/mL in EtOH with gentle warming and ultrasonic

In Vitro

Preparing Stock Solutions	Solvent	Mass		
		1mg	5mg	10mg
	Concentration			
	1 mM	1.7431 mL	8.7154 mL	17.4307 mL
	5 mM	0.3486 mL	1.7431 mL	3.4861 mL
	10 mM	0.1743 mL	0.8715 mL	1.7431 mL

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

Biological Activity

Shortsummary

Bcl-2 inhibitor, inhibits Bcl-2, Bcl-XL and Mcl-1

IC₅₀ & Target

0.29 μ M (Ki) (Bcl-2), 1.11 μ M (Ki) (Bcl-xL), 0.26 μ M (Ki) (Mcl-1)

In Vitro

Cell Viability Assay

Cell Line:	BxPC-3 and Colo-357 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:	750 nM, 72 hours for cell growth inhibition 500 nM, 48 hours for apoptosis

		induction (measured by Annexin V)
	Applications:	The cell viability was assessed by the clonogenic assay. TW-37 resulted in a significant inhibition of colony formation of BxPC-3 and Colo-357 cells when compared with control. Besides that, TW-37 induced apoptosis in a dose- and time-dependent manner. In the Annexin V assay, the percentage of apoptotic cells increased from 5% to 6% in the control to 12% to 14% in both BxPC-3 and Colo-357 cell lines.
In Vivo	Animal experiment	
	Animal models:	Female ICR-SCID mice bearing Colo-357 xenografts
	Dosage form:	Intravenous injection, 20 mg/kg/d
	Applications:	TW-37 treatment significantly inhibited pancreatic tumor growth in vivo. Western blot analysis showed that the expression level of Notch-1 was significantly lower in tumors from the TW-37-treated mice than those from vehicle-treated control mice. In addition, the expression of Jagged-1 and Notch-1 downstream target gene, Hes-1, was also down-regulated in TW-37-treated tumors.
	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. Yang IH, Ahn CH, et al. "Heme Oxygenase-1 is a Key Molecule Underlying Differential Response of TW-37-Induced Apoptosis in Human Mucoepidermoid Carcinoma Cells." *Molecules*. 2019 May 1;24(9).

pii: E1700.PMID:31052354

2. Russo M, Milito A, et al. "CK2 and PI3K are direct molecular targets of quercetin in chronic lymphocytic leukaemia." *Oncotarget*. 2017 Jun 27;8(26):42571-42587.PMID:28489572

See more customer validations on www.apexbt.com.

References

[1] Wang Z, Azmi A S, Ahmad A, et al. TW-37, a small-molecule inhibitor of Bcl-2, inhibits cell growth and induces apoptosis in pancreatic cancer: involvement of Notch-1 signaling pathway. *Cancer research*, 2009, 69(7): 2757-2765.

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 APExBIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage

temperature. Shortterm 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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