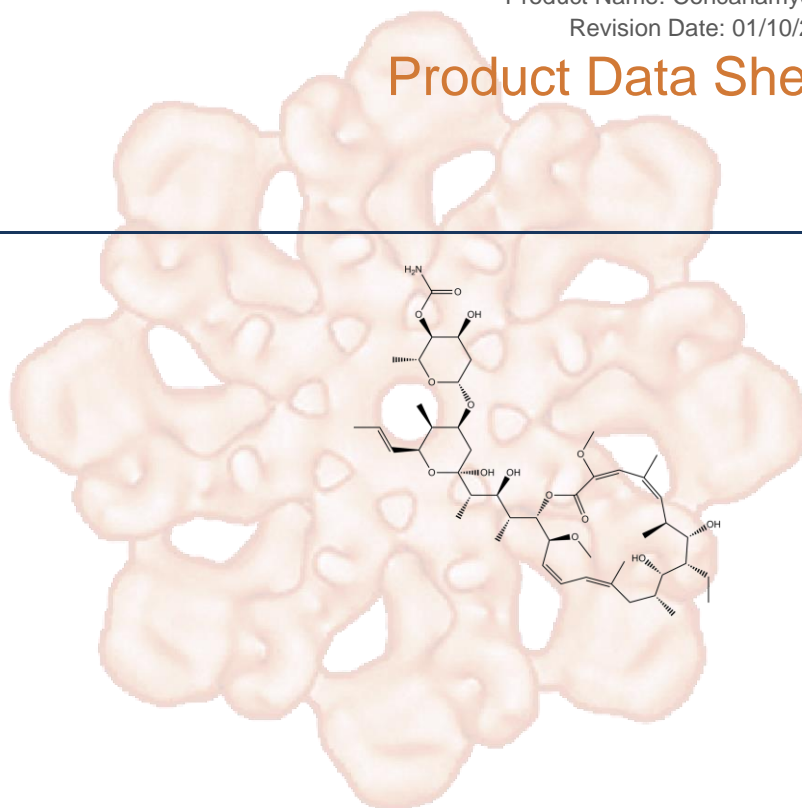


Concanamycin A

Cat. No.:	A8633
CAS No.:	80890-47-7
Formula:	C ₄₆ H ₇₅ NO ₁₄
M.Wt:	866.09
Synonyms:	
Target:	Ubiquitination/ Proteasome
Pathway:	Autophagy
Storage:	Store at -20°C



Solvent & Solubility

Limited solubility, soluble in DMSO

In Vitro

Preparing Stock Solutions	Solvent Concentration	Mass	1mg	5mg	10mg
	1 mM		1.1546 mL	5.7731 mL	11.5461 mL
	5 mM		0.2309 mL	1.1546 mL	2.3092 mL
	10 mM		0.1155 mL	0.5773 mL	1.1546 mL

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

Biological Activity

Shortsummary

V-type (vacuolar) H⁺-ATPase inhibitor

IC₅₀ & Target

Cell Viability Assay

In Vitro

Cell Line:	HCT-116, DLD-1, Colo206F, HeLa cells, Androgen-dependent (LNCaP) and androgen-independent (C4-2B) cells.
Preparation method:	This compound is limited soluble in DMSO. 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:	20 nM, 60 min

	Applications:	CCA effectively attenuated the TRAIL-induced activation of caspases in TRAIL-sensitive colorectal cancer cell lines. In CCA-treated Colo206F cells, the number of M30-positive apoptotic cells gradually increased and almost reached the proportion seen in untreated cells within 3–4h after the addition of TRAIL. Treatment with CCA resulted in a lack of apoptosis-related chromatin condensation in DLD-1 cells incubated with TRAIL for 90 min. Treatment with nanomolar concentrations of concanamycin A reduced the in vitro invasion in LNCaP and C4-2B cell types by 80%.
In Vivo	Animal experiment	
	Applications:	
	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. Zhang G, Xu M, et al. "Up-regulation of granzyme Band perforin by staphylococcal enterotoxin C2 mutant induces enhanced cytotoxicity in Hepa1-6 cells." *Toxicol Appl Pharmacol*. 2016 Dec 15;313:1-9. PMID:27742270

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References

[1]. Horova V, et al., Inhibition of vacuolar ATPase attenuates the TRAIL-induced activation of caspase-8 and modulates the trafficking of TRAIL receptosomes. *FEBS J*, 2013. 280(14).

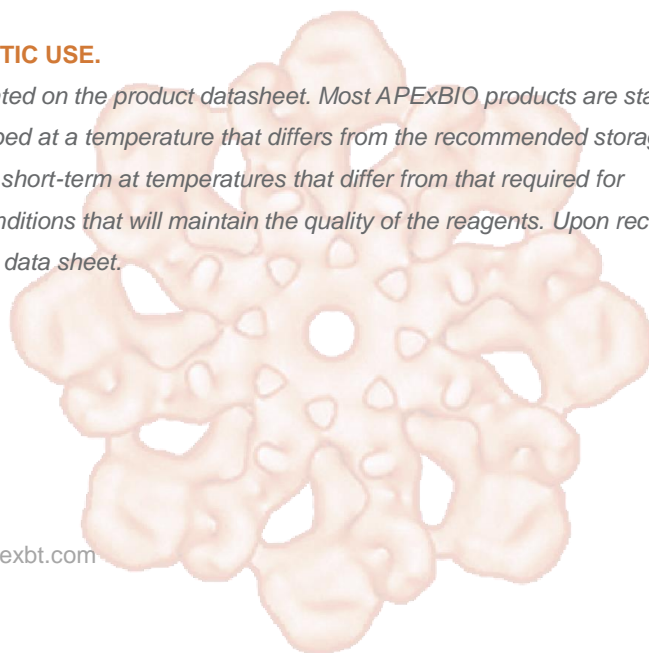
[2]. Michel V, et al., Inhibitors of vacuolar ATPase proton pumps inhibit human prostate cancer cell invasion and prostate-specific antigen expression and secretion. *Int J Cancer*. 2013.132(2).

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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