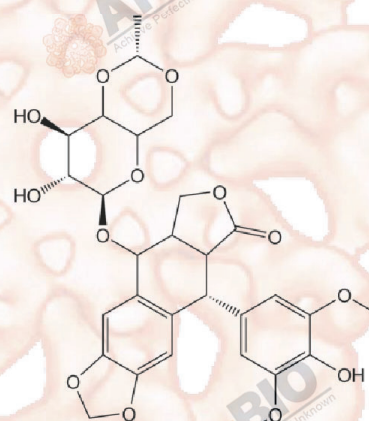


Product Data Sheet

Etoposide

Cat. No.:	A1971
CAS No.:	33419-42-0
Formula:	C ₂₉ H ₃₂ O ₁₃
M.Wt:	588.56
Synonyms:	
Target:	DNA Damage/DNA Repair
Pathway:	Topoisomerase
Storage:	Store at -20°C



Solvent & Solubility

≥29.45 mg/mL in DMSO; insoluble in H₂O; insoluble in EtOH

In Vitro

	Solvent	Mass	1mg	5mg	10mg
Preparing Stock Solutions	Concentration				
	1 mM		1.6991 mL	8.4953 mL	16.9906 mL
	5 mM		0.3398 mL	1.6991 mL	3.3981 mL
	10 mM		0.1699 mL	0.8495 mL	1.6991 mL

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

Biological Activity

Shortsummary

Topo II inhibitor

IC₅₀ & Target

Cell Viability Assay

In Vitro

Cell Line:

BGC-823, HeLa and A549 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:	0.5, 1, 10, 20, 50, 100, 200 and 500 μ M; 2 d
	Applications:	The IC50 values of Etoposide against the tumor cell lines of BGC-823, HeLa and A549 were $43.74 \pm 5.13 \mu$ M, $209.90 \pm 13.42 \mu$ M and $139.54 \pm 7.05 \mu$ M, respectively.
In Vivo	Animal experiment	
	Animal models:	Murine angiosarcoma xenografts ISOS-1
	Dosage form:	2.5, 5, 10 mg/kg; i.p.; every day for 5 days
	Applications:	The dose of 10 mg/kg Etoposide (i.p.) inhibited murine angiosarcoma cell ISOS-1 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. Barot S, Abo-Ali EM, et al. "Inhibition of glycogen catabolism induces intrinsic apoptosis and augments multikinase inhibitors in hepatocellular carcinoma cells." Exp Cell Res. 2019 Aug 15;381(2):288-300.PMID:31128107
2. Rogers C, Erkes DA, et al. "Gasdermin pores permeabilize mitochondria to augment caspase-3 activation during apoptosis and inflammasome activation." Nat Commun. 2019 Apr 11;10(1):1689.PMID:30976076
3. Wu Q, Wei X, et al. "Bionic 3D spheroids biosensor chips for high-throughput and dynamic drug screening." Biomed Microdevices. 2018 Sep 15;20(4):82.PMID:30220069
4. Lochmann TL, Floros KV, et al. "Venetoclax Is Effective in Small-Cell Lung Cancers with High BCL-2 Expression." Clin Cancer Res. 2018 Jan 15;24(2):360-369.PMID:29118061
5. Xia L, Xiao X, et al. "Coactosin-like protein CLP/Cot11 suppresses breast cancer growth through activation of IL-24/PERP and inhibition of non-canonical TGF β signaling." Oncogene. 2018 Jan 18;37(3):323-331.PMID:28925397

See more customer validations on www.apexbt.com.

References

- [1]. Beauchesne P, Bertrand S, N'guyen MJ, Christianson T, Dore JF, Mornex F, Bonner JA. Etoposide sensitivity of radioresistant human glioma cell lines. Cancer Chemother Pharmacol. 1998;41(2):93-7.
- [2]. Xiao L, Zhao W, Li HM, Wan DJ, Li DS, Chen T, Tang YJ. Design and synthesis of the novel DNA topoisomerase II inhibitors: Esterification and amination substituted 4'-demethylepipodophyllotoxin derivatives exhibiting anti-tumor activity by activating ATM/ATR signaling pathways. Eur J Med Chem. 2014 Jun 10;80:267-77.
- [3]. Ma G1, Masuzawa M, Hamada Y, Haraguchi F, Tamauchi H, Sakurai Y, Fujimura T, Katsuoka K. Treatment of murine angiosarcoma with etoposide, TNP-470 and prednisolone. J Dermatol Sci. 2000 Nov;24(2):126-33.

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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