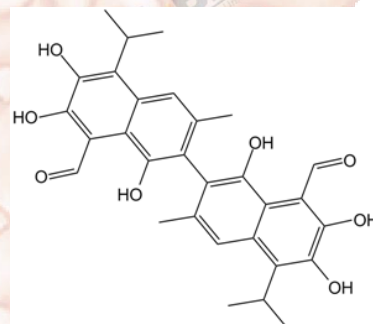


Product Data Sheet

AT-101

Cat. No.:	A3196
CAS No.:	90141-22-3
Formula:	C30H30O8
M.Wt:	518.55
Synonyms:	(R)-(-)-Gossypol;R-(-)-gossypol acetic acid;AT101;AT101
Target:	Apoptosis
Pathway:	Bcl-2 Family
Storage:	Store at -20°C



Solvent & Solubility

≥20.7 mg/mL in DMSO

In Vitro

Preparing Stock Solutions	Mass		1mg	5mg	10mg
	Solvent	Concentration			
		1 mM	1.9285 mL	9.6423 mL	19.2845 mL
		5 mM	0.3857 mL	1.9285 mL	3.8569 mL
		10 mM	0.1928 mL	0.9642 mL	1.9285 mL

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

Biological Activity

Shortsummary

BH3-mimetic,gossypol enantiomer

IC₅₀ & Target

Cell Viability Assay

In Vitro

Cell Line:	CLL(Chronic lymphocytic leukemia) B cell
Preparation method:	Soluble in DMSO > 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, 3, 10, 15, 20, 30µm for 24h; 20µm for 4, 8, 24 hours

	Applications:	AT-101 induced apoptosis in CLL B cells and overcomes microenvironment-mediated resistance while sparing normal stromal cells. AT-101 treatment resulted in cleavage of Mcl-1 (Myeloid cell leukemia-1) in a time- and dose-dependent fashion. The decrease in full-length Mcl-1 correlated well with annexin positivity and PARP(poly ADP-ribose polymerase) cleavage.
In Vivo	Animal experiment	
	Animal models:	athymic nude mice with allografted intracranial medulloblastomas from Ptch+/-; p53-/- mouse
	Dosage form:	20 or 40 mg/kg, daily administered, oral gavage
	Applications:	Treatment with AT-101 obviously inhibited the growth of allografted medulloblastoma in mice. AT-101 might inhibit the growth of Hh(hedgehog)-driven medulloblastoma in vivo by suppressing the Hh pathway
	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]. Balakrishnan K, Burger J, et al, AT-101 induces apoptosis in CLL B cells and overcomes stromal cell-mediated Mcl-1 induction and drug resistance. Blood, 2009, 113(1): 149–153.
- [2]. Wang J1, Peng Y, et al, AT-101 inhibits hedgehog pathway activity and cancer growth. Cancer Chemother Pharmacol. 2015 Sep;76(3):461-9. doi: 10.1007/s00280-015-2812-x. Epub 2015 Jun 26.

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.

APEx BIO Technology

www.apexbt.com

7505 Fannin street, Suite 410, Houston, TX 77054.
Tel: +1-832-696-8203 | Fax: +1-832-641-3177 | Email: info@apexbt.com

