

Gossypol

Chemical Properties

CAS No. : 303-45-7

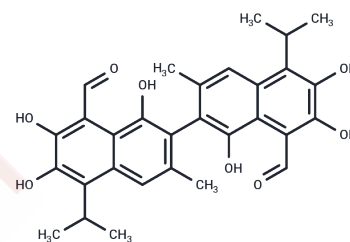
Formula: C₃₀H₃₀O₈

Molecular Weight: 518.55

Keep away from direct sunlight

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Actual storage temperature shall be subject to the COA.



Biological Description

Description	Gossypol (BL 193) Acetate is a polyphenolic aldehyde that permeates cells and acts as an inhibitor for several dehydrogenase enzymes.
Targets(IC50)	Bcl-2 Family, Dehydrogenase
In vitro	Gossypol, a known antispermatogenic agent from the cotton plant genus Gossypium, was found to inhibit yellow perch sperm motility in vitro and lactate dehydrogenase activity in spermatozoa when used in a dose-dependent manner[1]. Gossypol has been approved to have antiproliferative and apoptosis-inducing effects on some kinds of cancer cell lines in vitro[2].
Cell Research	MM(Multiple myeloma) cells are plated in 24-cell culture clusters at a density of 1x10 ⁵ viable cells/l per well. Triplicate wells are treated with 1, 5, 10, 25 and 50 μmol/l gossypol acetate, and the negative control group is supplemented with 0.1% DMSO. Then, cell numbers at different treatment time points (0, 24, 48 and 72 h) are determined by using a hemocytometer and the trypan blue dye-exclusion method. The trypan blue dye-exclusion method is used to evaluate the cell viability. The cells are examined in a counting chamber under a light microscope. Only viable cells are recorded. (Only for Reference)

Solubility Information

Solubility	DMSO: 250 mg/mL (482.11 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 5 mg/mL (9.64 mM), Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
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
50 mM	0.0386 mL	0.1928 mL	0.3857 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Ciereszko A, et al. *Aquat Toxicol*, 2000,49(3):181-187.

Yongqiang Zhao, et al. *Blood*. 2005, 106:4405.

Udoh P, et al. *Contraception*. 1992, 45(5):493-509.

Lin J, et al. *Oncol Rep*. 2013, 30(2):731-738.

Tang J, et al. *Int J Clin Exp Med*. 2015, 8(6):9079-85.

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