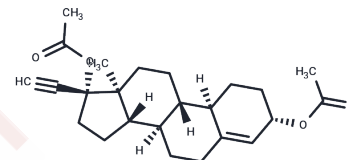


## Ethinodiol diacetate

## Chemical Properties

CAS No. :	297-76-7
Formula:	C <sub>24</sub> H <sub>32</sub> O <sub>4</sub>
Molecular Weight:	384.51
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	Ethinodiol diacetate (Ethinodiol acetate) is a synthetic progestational hormone utilized alone or combined with estrogens as an oral contraceptive.
Targets(IC50)	Estrogen/progestogen Receptor, Progesterone Receptor
In vitro	Daily administration of 75 µg of Norgestrel combined with 150 µg of Ethynodiol diacetate and 7.5 µg of Ethinyl estradiol can downregulate plasma concentrations of high-density lipoprotein cholesterol in cynomolgus monkeys. Additionally, a dosage of 6 mg/kg of Ethynodiol diacetate significantly elevates the levels of 3alpha-hydroxy-5alpha-pregnan-20-one and A-homo-3-oxa-5alpha-pregnane-4,20-dione in the urine of female rats, and markedly increases the weight of the rat's pituitary, liver, and kidneys.
In vivo	In the presence of an S9 mix, treatment with NDGA inhibits the genotoxic damage induced by Ethynodiol diacetate, which may be attributed to the suppression of cytochrome P450s that prevent the metabolic activation of Ethynodiol diacetate, or due to NDGA's radical scavenging properties. Concurrently, 150 µg/mL Ethynodiol diacetate increases the rate of sister chromatid exchanges and the frequency of chromosomal aberrations in human lymphocytes, and inhibits lymphocyte proliferation. Notably, < 1.5 µM NDGA can reduce the rate of sister chromatid exchanges in human lymphocytes treated with 150 µg/mL Ethynodiol diacetate.

## Solubility Information

Solubility	DMSO: 40 mg/mL (104.03 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: 3.3 mg/mL (8.58 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

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	<b>1mg</b>	<b>5mg</b>	<b>10mg</b>
1 mM	2.6007 mL	13.0036 mL	26.0071 mL
5 mM	0.5201 mL	2.6007 mL	5.2014 mL
10 mM	0.2601 mL	1.3004 mL	2.6007 mL
50 mM	0.052 mL	0.2601 mL	0.5201 mL

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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

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