# **Screening Libraries**

# **Product** Data Sheet

# Melengestrol acetate

Cat. No.: HY-111614 CAS No.: 2919-66-6 Molecular Formula:  $C_{25}H_{32}O_4$ Molecular Weight: 396.52

Target: Progesterone Receptor

Pathway: Vitamin D Related/Nuclear Receptor

Powder -20°C Storage:

2 years

3 years

-80°C In solvent 6 months

> -20°C 1 month

## **SOLVENT & SOLUBILITY**

In Vitro

DMSO: 25 mg/mL (63.05 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.5219 mL	12.6097 mL	25.2194 mL
	5 mM	0.5044 mL	2.5219 mL	5.0439 mL
	10 mM	0.2522 mL	1.2610 mL	2.5219 mL

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

In Vivo

- 1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: 2.5 mg/mL (6.30 mM); Suspended solution; Need ultrasonic
- 2. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (6.30 mM); Clear solution

### **BIOLOGICAL ACTIVITY**

Description

Melengestrol acetate is a progesterone derivative, acts as an orally active corticosteroid hormone to promote endometrial proliferation, pregnancy maintenance, and delay of menstrual activity<sup>[1]</sup>. Melengestrol Acetate is used as a contraceptive agent for growth promoting effects and suppression of estrus in animals. Melengestrol acetate inhibits both the androgendependent and -independent prostatic tumors in vivo and can be used for cancer research<sup>[2]</sup>.

In Vivo

Melengestrol acetate (s.c.; 10 mg/kg; 9 days) inhibits the growth of AT3 tumors by approximately 53%. And it also causes a 54% weight reduction of the ventral prostate and a reduction of the seminal vesicles in adult male CCFI rats<sup>[1]</sup>. Melengestrol acetate (oral administration; 10 mg/kg; 24 days) causes a 58.8% Dunning R3327-AT3 tumors growth and reduces the adrenal weight by 51.6% in rat<sup>[1]</sup>.

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### REFERENCES

- [1]. G M Padilla, et al. Melengestrol acetate and megestrol acetate are prostatic tumor inhibiting agents. Biochem Cell Biol. 1990 Oct;68(10):1181-8.
- $\hbox{[2]. GW DUNCAN, et al. BIOLOGIC EFFECTS OF MELENGESTROL ACETATE. Fertil Steril. Jul-Aug 1964; 15:416-32.}\\$
- $\hbox{\small [3]. https://www.sciencedirect.com/topics/agricultural-and-biological-sciences/melengestrol-acetate}$

Caution: Product has not been fully validated for medical applications. For research use only.

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