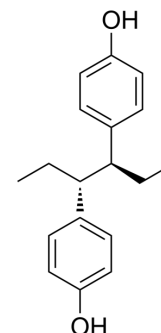


Hexestrol

Cat. No.:	HY-B1662
CAS No.:	84-16-2
Molecular Formula:	C ₁₈ H ₂₂ O ₂
Molecular Weight:	270.37
Target:	Estrogen Receptor/ERR
Pathway:	Vitamin D Related/Nuclear Receptor
Storage:	4°C, protect from light * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



SOLVENT & SOLUBILITY

In Vitro	DMSO : 100 mg/mL (369.86 mM; Need ultrasonic)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	Preparing Stock Solutions	1 mM	3.6986 mL	18.4932 mL	36.9864 mL
		5 mM	0.7397 mL	3.6986 mL	7.3973 mL
		10 mM	0.3699 mL	1.8493 mL	3.6986 mL
Please refer to the solubility information to select the appropriate solvent.					
In Vivo	<ol style="list-style-type: none"> Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: 2.08 mg/mL (7.69 mM); Suspended solution; Need ultrasonic Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.08 mg/mL (7.69 mM); Clear solution Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.08 mg/mL (7.69 mM); Clear solution 				

BIOLOGICAL ACTIVITY

Description	Hexestrol is a nonsteroidal synthetic estrogen, with a K _i of 0.06 and 0.06 nM for estrogen receptor alpha (ERα) and ERβ. Hexestrol can be used for the research of the diseases caused by estrogen deficiency, and it also can increase the weight of cattle ^{[1][2][3]} .	
IC₅₀ & Target	ERα 0.06 nM (K _i)	ERβ 0.06 nM (K _i)
In Vivo	Hexestrol (3 and 6 mg/kg; i.p. once daily for 30 days) has a not significant influence in the ovaries from mice at the dose of 3 mg/kg ^[2] .	

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

Animal Model:	Mus musculus (90-120 days, 25-50 g) ^[2]
Dosage:	3, 6 mg/kg (adopted the same dose used to increase weight gain in cattle)
Administration:	I.p. once daily for 30 days
Result:	Numerous follicles in different stages of development were found at the dose of 3 mg/kg in the ovaries. Not detected the corpora lutea (CL) at the dose of 6 mg/kg.

CUSTOMER VALIDATION

- Int J Med Microbiol. 2023 Mar 28;313(2):151578.
- Cell Rep Methods. 2023 Oct 23;3(10):100599.

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REFERENCES

- [1]. HARDING FE, et, al. The oral use of hexestrol for estrogen deficiency. Am J Obstet Gynecol. 1946 May; 51: 660-5.
- [2]. Oliveira JM, et, al. Effects of hexestrol on mouse ovarian morphology and ovulation. Maturitas. 2008 Jun 20; 60(2): 153-7.
- [3]. Kuiper GG, et, al. Comparison of the ligand binding specificity and transcript tissue distribution of estrogen receptors alpha and beta. Endocrinology. 1997 Mar;138(3):863-70.

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

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