

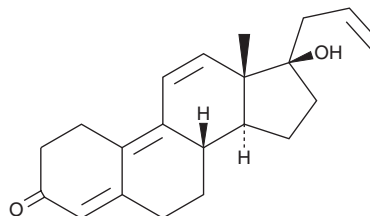
PRODUCT INFORMATION



Altrenogest

Item No. 27218

CAS Registry No.: 850-52-2
Formal Name: (17 β)-17-hydroxy-17-(2-propen-1-yl)-estra-4,9,11-trien-3-one
Synonyms: Allyltrenbolone, DRC 6246, RU 2267
MF: C₂₁H₂₆O₂
FW: 310.4
Purity: \geq 98%
UV/Vis.: λ_{max} : 242, 342 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: \geq 4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Altrenogest is supplied as a crystalline solid. A stock solution may be made by dissolving the altrenogest in the solvent of choice, which should be purged with an inert gas. Altrenogest is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of altrenogest in these solvents is approximately 20, 0.1, and 2 mg/ml, respectively.

Altrenogest is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, altrenogest should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. Altrenogest has a solubility of approximately 0.3 mg/ml in a 1:2 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Altrenogest is a synthetic progestin and an agonist of progesterone and androgen receptors (EC₅₀s = 0.64 and 0.63 nM, respectively, in *S. cerevisiae* cells expressing human receptors).¹ *In vivo*, altrenogest (20 mg/animal per day) reduces testicular weight, sperm content, and serum levels of luteinizing hormone and testosterone in boars.² Altrenogest (0.044 mg/kg) increases serum concentrations of equine chorionic gonadotropin and embryonic size in pregnant mares.³ It also decreases genital perfusion and increases estrus cycle length in mares.⁴ Formulations containing altrenogest have been used to synchronize estrus in horses and pigs.

References

- McRobb, L., Handelsman, D.J., Kazlauskas, R., *et al.* Structure-activity relationships of synthetic progestins in a yeast-based in vitro androgen bioassay. *J. Steroid Biochem. Mol. Biol.* **110**(1-2), 39-47 (2008).
- Kluber, E.F., III, Minton, J.E., Stevenson, J.S., *et al.* Growth, carcass traits, boar odor and testicular and endocrine functions of male pigs fed a progestogen, altrenogest. *J. Anim. Sci.* **66**(2), 470-478 (1988).
- Willmann, C., Schuler, G., Hoffmann, B., *et al.* Effects of age and altrenogest treatment on conceptus development and secretion of LH, progesterone and eCG in early-pregnant mares. *Theriogenology* **75**(3), 421-428 (2011).
- Bollwein, H., Kolberg, B., and Stolla, R. The effect of exogenous estradiol benzoate and altrenogest on uterine and ovarian blood flow during the estrous cycle in mares. *Theriogenology* **61**(6), 1137-1146 (2004).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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