

PRODUCT INFORMATION



Estradiol Rabbit Monoclonal Antibody (Clone RM343)

Item No. 42799

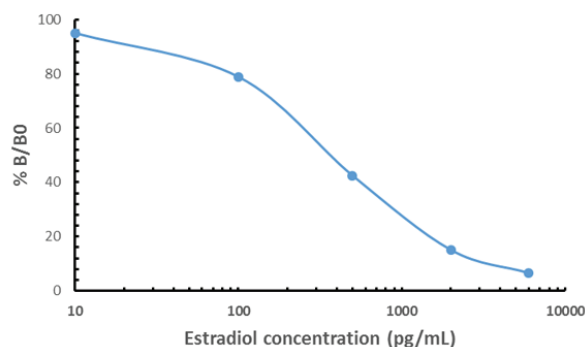
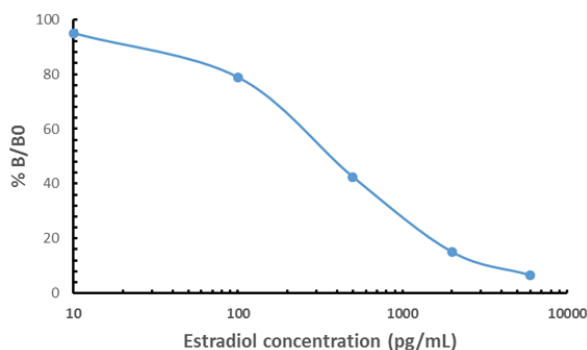
Overview and Properties

Contents: This vial contains 100 μ l of protein A-affinity purified monoclonal antibody.
Synonyms: E₂, β -Estradiol, 17 β -Estradiol, 17 β -Oestradiol
Immunogen: Estradiol BSA conjugate
Cross Reactivity: (+) Estradiol; (-) Dehydroepiandrosterone sulfate, 17 α -estradiol, Estriol, Estrone, Progesterone
Species Reactivity: Species Independent
Form: Liquid
Storage: -20°C (as supplied)
Stability: $\geq$ 1 year
Storage Buffer: PBS with 50% glycerol, 1% BSA, and 0.09% sodium azide
Concentration: 100 μ g/ml
Clone: RM343
Host: Rabbit
Applications: ELISA and Immunoassay; The optimal working concentration/dilution should be determined empirically.

Images

Compound	Cross Activity (%) (at 100 ng/ml)
Estradiol	100
17 α -estradiol	0.113
Estrone	2.185
Estriol	0.554
Progesterone	0.002
Dehydroepiandrosterone sulfate	(Non-detectable)

Cross activity of Estradiol Rabbit Monoclonal Antibody (Clone RM343) at 100 ng/ml.



Competitive ELISA using Estradiol Rabbit Monoclonal Antibody (Clone RM343).

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.

WARRANTY AND LIMITATION OF REMEDY
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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Description

Estradiol is a steroid hormone produced from testosterone *via* the aromatase system in the granulosa cells of ovarian follicles.¹⁻² It is instrumental in the development of secondary sex characteristics at puberty and in the menstrual cycle.³⁻⁵ Plasma levels of estradiol peak during the follicular phase of the menstrual cycle where it stimulates the proliferation of granulosa cells, increases the size of uterine glands, and exerts positive feedback on the hypothalamus, leading to an increase in luteinizing hormone (LH).^{1,3,4,6} Blood levels of estradiol drop as LH levels increase and trigger ovulation, then rise again during the luteal phase.³ Cayman's Estradiol Rabbit Monoclonal Antibody (Clone RM343) can be used for competitive ELISA and immunoassay applications.

References

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3. Jones, R.E., and Lopez, K.H. Chapter 3 - The Menstrual Cycle. *Human Reproductive Biology*, 4th ed., *Academic Press* (2014).
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5. Bordini, B. and Rosenfield, R.L. Normal pubertal development: Part I: The endocrine basis of puberty. *Pediatr. Rev.* **32**(6), 223-229 (2011)
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