

PRODUCT INFORMATION



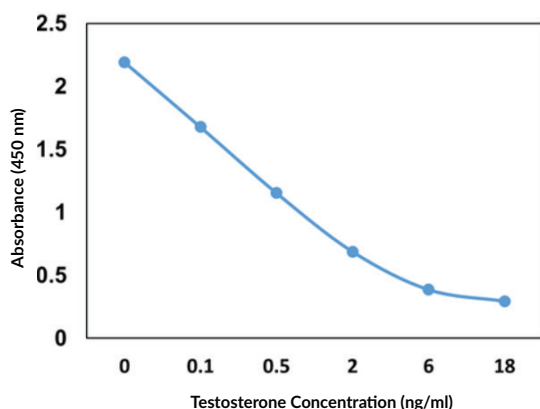
Testosterone Rabbit Monoclonal Antibody (Clone RM435)

Item No. 42802

Overview and Properties

Contents:	This vial contains 100 µg of protein A-affinity purified monoclonal antibody.
Immunogen:	Testosterone-KLH
Cross Reactivity:	(+) Testosterone
Species Reactivity:	(+) Human
Form:	Liquid
Storage:	-20°C (as supplied)
Stability:	≥1 year
Storage Buffer:	PBS with 50% glycerol, 1% BSA, and 0.09% sodium azide
Concentration:	1.0 mg/ml
Clone:	RM435
Host:	Rabbit
Isotype:	IgG
Application:	ELISA; the recommended starting concentration is 1-10 ng/well. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

Image



Representative standard curve for Testosterone Rabbit Monoclonal Antibody (Clone RM435) in a competitive ELISA.

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

Testosterone is the prototypic and predominant circulating androgenic steroid.^{1,2} It plays a major role in the growth and function of many reproductive and non-reproductive tissues and organs including muscle, liver, and brain, directing the development of the male phenotype during embryogenesis at puberty.¹ Testosterone is synthesized from pregnenolone by two main pathways, the Δ^4 and Δ^5 pathways. Both of these pathways involve the same three enzymes: the cytochrome P450 (CYP) isoform CYP17, 3 β -hydroxysteroid dehydrogenase (3 β -HSD), and 17 β -HSD. The human CYP17 favors the Δ^5 pathway, in which 17-hydroxypregnenolone is converted first to dehydroepiandrosterone (DHEA), then androstenedione, and finally testosterone. The Δ^4 pathway in which 17-hydroxyprogesterone is converted to androstenedione is also important, but less favored in humans. While testosterone is the androgen responsible for biological activity in tissues such as muscle, in other tissues including gonads and skin, it is converted to 5 α -DHT by the action of 5 α -reductase. Cayman's Testosterone Rabbit Monoclonal Antibody (Clone RM435) can be used for ELISA.

References

1. Kicman, A.T. Biochemical and physiological aspects of endogenous androgens. *Handb. Exp. Pharmacol.* **195**, 25-64 (2010).
2. Gower, D.B. Analysis of androgens and their derivatives. *Steroid Analysis*. Makin, H.L.J. and Gower, D.B., editors, 2nd edition, *Springer* (2010).

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