



# Anti-Testosterone monoclonal antibody, clone A7005 (DMAB4371)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

<b>Specificity</b>	Cross-reactivity: Testosterone 100.0% 5-alpha-Dihydrotestosterone 7.8%
<b>Immunogen</b>	Testosterone-3-CMO-BSA
<b>Isotype</b>	IgG1
<b>Source/Host</b>	Mouse
<b>Species Reactivity</b>	N/A
<b>Clone</b>	A7005
<b>Affinity Constant</b>	5 x 10 <sup>10</sup>
<b>Purification</b>	DEAE-chromatography
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	Specific methodologies have not been tested using this product.
<b>Format</b>	Purified, Liquid
<b>Concentration</b>	4.67mg/ml (OD280nm, E1% = 14)
<b>Buffer</b>	0.015 M Potassium phosphate buffer, 0.15M Sodium chloride, pH 7.2
<b>Preservative</b>	0.1% Sodium Azide
<b>Storage</b>	Short-term (up to 6 months) store at 2–8°C. Long term, aliquot and store at -20°C. Avoid multiple freeze/thaw cycles.
<b>Warnings</b>	This product contains sodium azide, which has been classified as Xn (Harmful) in European Directive 67/548/EEC in the concentration range of 0.1–1.0%. When disposing of this reagent through lead or copper plumbing, flush with copious volumes of water to prevent azide build-up in drains.

## BACKGROUND

## Introduction

Testosterone is a steroid hormone from the androgen group and is found in mammals, reptiles, birds, and other vertebrates. In mammals, testosterone is primarily secreted in the testes of males and the ovaries of females, although small amounts are also secreted by the adrenal glands. It is the principal male sex hormone and an anabolic steroid. In men, testosterone plays a key role in the development of male reproductive tissues such as the testis and prostate as well as promoting secondary sexual characteristics such as increased muscle, bone mass and the growth of body hair. In addition, testosterone is essential for health and well-being as well as the prevention of osteoporosis. On average, an adult human male body produces about ten times more testosterone than an adult human female body, but females are more sensitive to the hormone. Testosterone is conserved through most vertebrates, although fish make a slightly different form called 11-ketotestosterone. Its counterpart in insects is ecdysone. These ubiquitous steroids suggest that sex hormones have an ancient evolutionary history. Testosterone is the principal androgen, or male sex hormone. One of the groups of compounds known as anabolic steroids, testosterone is secreted by the testes but is also synthesized in small quantities in the ovaries, cortices of the adrenal glands, and placenta, usually from cholesterol. Testosterone is necessary in the fetus for the development of male external genitalia. Testosterone also stimulates protein synthesis and accounts for the greater muscular development of the male. For many years, synthetic steroids similar to testosterone have been used by athletes with the goal of improving performance, although recent medical research has shown that these drugs may have a wide range of harmful side effects.

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## Keywords

17 $\beta$  hydroxy 4 androsten 3 one antibody; Testosterone antibody; Testosterone

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