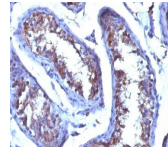


# Testosterone Monoclonal Mouse Antibody (4E1G2)



## Product Description

This MAbs is highly specific to testosterone. Its affinity constant for testosterone is  $\sim 10^{10} \text{ M}^{-1}$ . In competitive binding immunoassay, it reacts with testosterone 100%, 11-beta-hydroxy testosterone 3.3%, 17-alpha-methyl testosterone <0.1%, 5-alpha DHT 0.8%, estradiol <0.1% and progesterone <0.1%. Testosterone, a steroid hormone from the androgen group, is derived from cholesterol. Testosterone is primarily secreted in the testes, but the ovaries and adrenal glands also produce smaller amounts. It is the principal male sex hormone and is responsible for the maturation of sex organs and the development of male secondary sex characteristics. The hormone is also involved in the growth of muscle mass and increases bone density and maturation. It functions by activating the androgen receptor and converting to estradiol and activation of estrogen receptors. Testosterone has been employed therapeutically to treat many conditions including infertility, lack of libido, osteoporosis, height growth and bone marrow stimulation. Anti-testosterone antibody may also prove useful in identification of testicular tumors arising from interstitial cells.

Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the [CF® Dye Brochure](#) for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors.

**Stock status:** Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email [order@biotium.com](mailto:order@biotium.com) to inquire about stock status and lead times before placing your order.

## References

Note: References for this clone sold by other suppliers may be listed for expected applications.

1. J Hum Reprod Sci (2018) 11(3): 291-296. (RIA)
2. Syst Biol Reprod Med (2018) 64(3): 191-201. (RIA)

## Product attributes

Antibody number	#0250
Antibody reactivity (target)	Testosterone
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	4E1G2
Isotype	IgG1, kappa
Molecular weight	288.42Da
Synonyms	17β-Hydroxy-3-oxo-4-androstene, 17β-Hydroxy-4-androsten-3-one, 4-Androsten-17β-ol-3-one, trans-Testosterone
Entrez gene ID	Not Applicable
SwissProt	Not Applicable
Unigene	Not Applicable
Immunogen	Testosterone 3 CMO conjugated to BSA
Antibody target cellular localization	Cytoplasmic, Secreted (extracellular)
Verified antibody applications	IHC (FFPE) (verified)
Species reactivity	All species
Expected antibody	RIA (published for clone)
Antibody application notes	Staining of formalin-fixed tissues is enhanced by boiling tissue sections in 10 mM citrate buffer pH 6.0 for 10-20 min followed by cooling at RT for 20 min, Immunohistology formalin-paraffin 0.25-0.5 ug/mL, ELISA For coating, order Ab without BSA, Optimal dilution for a specific application should be determined by user
Positive control	Interstitial or Leydig cells in testis.
Shipping condition	Room temperature
Storage Conditions	Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended
Regulatory status	For research use only (RUO)
Antibody/conjugate formulation	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide
Antibody research areas	Endocrinology
Cell/tissue expression	Testis
Tumor expression	Testicular cancer

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel	Dye Features
BNC04	CF®405S	404/431	405	DAPI (microscopy), AF405	<a href="#">CF®405S Features</a>
BNC88	CF®488A	490/515	488	GFP, FITC	<a href="#">CF®488A Features</a>
BNC68	CF®568	562/583	532, 561	RFP, TRITC	<a href="#">CF®568 Features</a>
BNC94	CF®594	593/614	561	Texas Red®	<a href="#">CF®594 Features</a>
BNC40	CF®640R	642/662	633-640	Cy®5	<a href="#">CF®640R Features</a>
BNC47	CF®647	650/665	633-640	Cy®5	<a href="#">CF®647 Features</a>
BNCB	Biotin	N/A	N/A	N/A	
BNUB	Purified	N/A	N/A	N/A	
BNUM	Purified, BSA-free	N/A	N/A	N/A	

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