

Testosterone (XM209): sc-52242

BACKGROUND

Testosterone is a steroid hormone from the androgen group that is primarily secreted by the testes but is also secreted in small quantities in the ovaries, cortices of the adrenal glands and placenta, usually from cholesterol. It is the principal male sex hormone that is necessary in the fetus for the development of male external genitalia. Testosterone stimulates protein synthesis and accounts for the greater muscular development of the male. It is also responsible for the development of male secondary sex characteristics, such as facial hair and voice depth. In both males and females, Testosterone plays key roles in health and well-being. Several man-made derivatives of Testosterone are used to treat advanced disseminated breast cancer in women, especially when it has spread to the bones.

REFERENCES

1. Fantl, V.E. and Wang, D.Y. 1983. Characterisation of monoclonal antibodies raised against Testosterone. *J. Steroid Biochem.* 19: 1605-1610.
2. Haupt, H.A. and Rovere, G.D. 1985. Anabolic steroids: a review of the literature. *Am. J. Sports Med.* 12: 469-484.
3. Neaeu, E., Oniciu, D. and Simionescu, L. 1991. The development of a radioimmunoassay system for Testosterone (DHT). Part 1. The preparation of the T-derivatives and T-protein conjugates. *Endocrinologie* 28: 25-31.
4. Bahrke, M.S., Yesalis, C.E. and Wright, J.E. 1991. Psychological and behavioural effects of endogenous Testosterone levels and anabolic-androgenic steroids among males. A review. *Sports Med.* 10: 303-337.
5. Morley, J.E., Perry, H.M., Kaiser, F.E., Kraenzle, D., Jensen, J., Houston, K., Mattammal, M. and Perry, H.M. 1993. Effects of Testosterone replacement therapy in old hypogonadal males: a preliminary study. *J. Am. Geriatr. Soc.* 41: 149-152.
6. Anderson, R.A., Bancroft, J. and Wu, F.C. 1993. The effects of exogenous Testosterone on sexuality and mood of normal men. *J. Clin. Endocrinol. Metab.* 75: 1503-1507.
7. Urban, R.J., Bodenbun, Y.H., Gilkison, C., Foxworth, J., Coggan, A.R., Wolfe, R.R. and Ferrando, A. 1996. Testosterone administration to elderly men increases skeletal muscle strength and protein synthesis. *Am. J. Physiol.* 269: E820-E826.
8. Barton, D.L., Wender, D.B., Sloan, J.A., Dalton, R.J., Balcueva, E.P., Atherton, P.J., Bernath, A.M., Jr., DeKrey, W.L., Larson, T., Bearden, J.D., 3rd., Carpenter, P.C. and Loprinzi, C.L. 2007. Randomized controlled trial to evaluate transdermal testosterone in female cancer survivors with decreased libido; North Central Cancer Treatment Group protocol N02C3. *J. Natl. Cancer Inst.* 99: 672-679.
9. Yeap, B.B., Almeida, O.P., Hyde, Z., Norman, P.E., Chubb, S.A., Jamrozik, K. and Flicker, L. 2007. In men older than 70 years, total testosterone remains stable while free testosterone declines with age. *The Health in Men Study. Eur. J. Endocrinol.* 156: 585-594.

SOURCE

Testosterone (XM209) is a mouse monoclonal antibody raised against purified testosterone conjugated to BSA.

PRODUCT

Each vial contains 100 µg IgG_{2a} in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Testosterone (XM209) is recommended for detection of testosterone of mouse, rat and human origin by solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.