

Lutropin β (R-16): sc-7824

BACKGROUND

Various hormones are secreted from the anterior pituitary gland during development and growth. Lutropin, also called luteinizing hormone (LH), plays a role in spermatogenesis and ovulation by stimulating the testes and ovaries to produce steroids. LH, like many of the anterior pituitary hormones, consists of heterodimers formed from a common α chain and a unique β chain. Lutropin exists in a variety of isoforms, as the hormone is proteolytically processed and metabolized throughout circulation. LH modulates the processing of amyloid- β precursor protein and amyloid- β deposition. Pituitary exit of LH and FSH occur via different secretion pathways, and are released spatially from the pituitary via different circulatory routes.

REFERENCES

1. Couzinet, B., et al. 1993. The control of gonadotrophin secretion by ovarian steroids. *Hum. Reprod.* 2: 97-101.
2. Birken, S., et al. 1996. Metabolism of hCG and hLH to multiply urinary forms. *Mol. Cell. Endocrinol.* 125: 121-131.

CHROMOSOMAL LOCATION

Genetic locus: LHB (human) mapping to 19q13.33; Lhb (mouse) mapping to 7 B4.

SOURCE

Lutropin β (R-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Lutropin β of rat origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-7824 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Lutropin β (R-16) is recommended for detection of Lutropin β of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with Gonadotropin.

Suitable for use as control antibody for Lutropin β siRNA (h): sc-39319, Lutropin β siRNA (m): sc-39320, Lutropin β shRNA Plasmid (h): sc-39319-SH, Lutropin β shRNA Plasmid (m): sc-39320-SH, Lutropin β shRNA (h) Lentiviral Particles: sc-39319-V and Lutropin β shRNA (m) Lentiviral Particles: sc-39320-V.

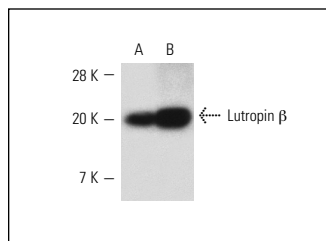
Molecular Weight of Lutropin β : 22 kDa.

Positive Controls: mouse pituitary gland extract: sc-364246 or rat pituitary gland extract: sc-364807.

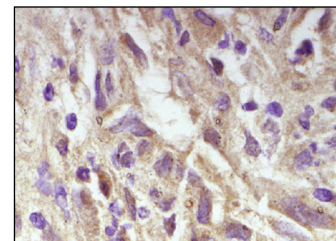
STORAGE

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

DATA



Lutropin β (R-16): sc-7824. Western blot analysis of Lutropin β expression in mouse pituitary (A) and rat pituitary (B) tissue extracts.



Lutropin β (R-16): sc-7824. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human ovary tissue showing membrane and cytoplasmic staining.

SELECT PRODUCT CITATIONS

1. Rivas, M.P., et al. 1990. Radiological appearance of the paranasal sinuses in allergic rhinitis. Apropos of 255 cases. Comparison between patients from urban and rural environments. *An. Otorrinolaringol. Ibero Am.* 17: 57-65.
2. Kubosaki, A., et al. 2006. Disruption of the transmembrane dense core vesicle proteins IA-2 and IA-2 β causes female infertility. *Endocrinology* 147: 811-815.
3. Jeong, K.H., et al. 2009. Expression of a gonadotropin-releasing hormone receptor-simian virus 40 T-antigen transgene has sex-specific effects on the reproductive axis. *Endocrinology* 150: 3383-3391.
4. Watanabe, T., et al. 2012. A unique ball-shaped Golgi apparatus in the rat pituitary gonadotrope: its functional implications in relation to the arrangement of the microtubule network. *J. Histochem. Cytochem.* 60: 588-602.
5. Sun, Y., et al. 2012. Loss-of-function mutations in IGSF1 cause an X-linked syndrome of central hypothyroidism and testicular enlargement. *Nat. Genet.* 44: 1375-1381.

RESEARCH USE

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

PROTOCOLS

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



Try **Lutropin β (C-6): sc-373941** or **Lutropin β (B-6): sc-374017**, our highly recommended monoclonal alternatives to Lutropin β (R-16).