SANTA CRUZ BIOTECHNOLOGY, INC.

Lutropin β (A-9): sc-393284

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Various hormones are secreted from the anterior pituitary gland during development and growth. Lutropin, also called luteinizing hormone (LH), plays a role in spermato-genesis 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

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3. Sherman, G.B., et al. 1997. Characterization and phylogenetic significance of rhinoceros luteinizing hormone β (LHβ) subunit messenger RNA structure, complementary DNA sequence and gene copy number. Gene 195: 131-139.
4. Hakola, K., et al. 1998. Recombinant forms of rat and human luteinizing hormone and follicle-stimulating hormone; comparison of functions *in vitro* and *in vivo*. J. Endocrinol. 158: 441-448.
5. Arnold, C.J., et al. 1998. The human follitropin α-subunit C terminus collaborates with a β-subunit cystine noose and an α-subunit loop to assemble a receptor-binding domain competent for signal transduction. Biochemistry 37: 1762-1768.
6. Jablonka-Shariff, A., et al. 2002. Evolution of lutropin to chorionic gonadotropin generates a specific routing signal for apical release *in vivo*. J. Biol. Chem. 277: 879-882.
7. Xing, Y., et al. 2004. Use of protein knobs to characterize the position of conserved α-subunit regions in lutropin receptor complexes. J. Biol. Chem. 279: 44427-44437.
8. Bernard, M.P., et al. 2004. Only a portion of the small seatbelt loop in human choriogonadotropin appears capable of contacting the lutropin receptor. J. Biol. Chem. 279: 44438-44441.

CHROMOSOMAL LOCATION

Genetic locus: Lhb (mouse) mapping to 7 B4.

SOURCE

Lutropin β (A-9) is a mouse monoclonal antibody raised against amino acids 61-103 mapping within an internal region of Lutropin β of mouse origin.

PRODUCT

Each vial contains 200 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Lutropin β (A-9) is recommended for detection of Lutropin β of mouse and rat origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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

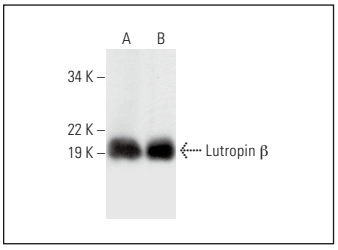
Molecular Weight of Lutropin β: 22 kDa.

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

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



Lutropin β (A-9): sc-393284. Western blot analysis of Lutropin β expression in mouse pituitary gland (**A**) and rat pituitary (**B**) tissue extracts.

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.