

Lutropin β (Y-13): sc-54093

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. Lutropin, 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. Lutropin modulates the processing of β -Amyloid precursor protein and β -Amyloid deposition. Pituitary exit of Lutropin and FSH occur via different secretion pathways and are released spatially from the pituitary via different circulatory routes.

REFERENCES

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- Birken, S., et al. 1996. Metabolism of hCG and hLH to multiple urinary forms. *Mol. Cell. Endocrinol.* 125: 121-131.
- Sherman, G.B., et al. 1997. Characterization and phylogenetic significance of rhinoceros luteinizing hormone β (LH β) subunit messenger RNA structure, complementary DNA sequence and gene copy number. *Gene* 195: 131-139.
- 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.
- 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.
- 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.

CHROMOSOMAL LOCATION

Genetic locus: LHB (human) mapping to 19q13.33, CGB2 (human) mapping to 19q13.33.

SOURCE

Lutropin β (Y-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Lutropin β of human 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-54093 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

Lutropin β (Y-13) is recommended for detection of Lutropin β chain and Choriogonadotropin β chain of 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Gonadotropin siRNA (h): sc-39317, Gonadotropin shRNA Plasmid (h): sc-39317-SH and Gonadotropin shRNA (h) Lentiviral Particles: sc-39317-V.

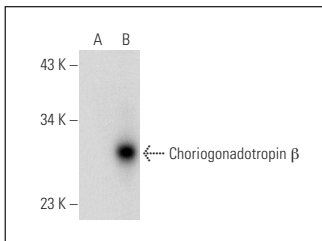
Molecular Weight of Lutropin β : 22 kDa.

Positive Controls: Choriogonadotropin β (h2): 293T Lysate: sc-170178 or human pituitary tissue extract.

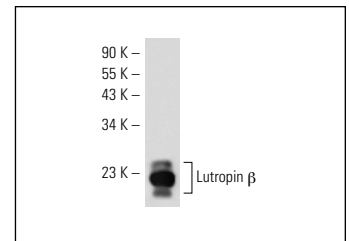
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



Lutropin β (Y-13): sc-54093. Western blot analysis of Choriogonadotropin β expression in non-transfected: sc-117752 (A) and human Choriogonadotropin β transfected: sc-170178 (B) 293T whole cell lysates.



Lutropin β (Y-13): sc-54093. Western blot analysis of Lutropin β expression in human pituitary tissue extract.

RESEARCH USE

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


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Try **Lutropin β (C-6): sc-373941** or **Lutropin β (B-6): sc-374017**, our highly recommended monoclonal alternatives to Lutropin β (Y-13).