

Lutropin β (C-14): sc-54091

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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2. Birken, S., et al. 1996. Metabolism of hCG and hLH to multiple urinary forms. *Mol. Cell. Endocrinol.* 125: 121-131.
3. 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.
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.

CHROMOSOMAL LOCATION

Genetic locus: LHB (human) mapping to 19q13.32; Lhb (mouse) mapping to 7 B4.

SOURCE

Lutropin β (C-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus 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-54091 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Lutropin β (C-14) is recommended for detection of Lutropin 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); may cross-react with Choriogonadotropin β chain.

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

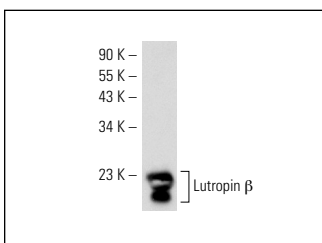
Molecular Weight of Lutropin β : 22 kDa.

Positive Controls: 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 (C-14): sc-54091. Western blot analysis of Lutropin β expression in human pituitary tissue extract.

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.



Try **Lutropin β (C-6): sc-373941** or **Lutropin β (B-6): sc-374017**, our highly recommended monoclonal alternatives to Lutropin β (C-14).