

# Lutropin $\beta$ (K-13): sc-54092

## 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  $\alpha$  chain and a unique  $\beta$  chain. Lutropin exists in a variety of isoforms, as the hormone is proteolytically processed and metabolized throughout circulation. LH modulates the processing of amyloid-beta precursor protein and amyloid- $\beta$  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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- Sherman, G.B., et al. 1997. Characterization and phylogenetic significance of rhinoceros luteinizing hormone  $\beta$  (LH $\beta$ ) subunit messenger RNA structure, complementary DNA sequence and gene copy number. *Gene* 195: 131-139.
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- Xing, Y., et al. 2004. Use of protein knobs to characterize the position of conserved  $\alpha$ -subunit regions in lutropin receptor complexes. *J. Biol. Chem.* 279: 44427-44437.
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## CHROMOSOMAL LOCATION

Genetic locus: LHB/CGB1/CGB2/CGB7/CGB8/CGB5/CGB (human) mapping to 19q13.33.

## SOURCE

Lutropin  $\beta$  (K-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Lutropin  $\beta$  of human origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-54092 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

Lutropin  $\beta$  (K-13) is recommended for detection of Lutropin  $\beta$  chain and Chorionic gonadotropin  $\beta$  chain of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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  $\beta$  siRNA (h): sc-39319, Lutropin  $\beta$  shRNA Plasmid (h): sc-39319-SH and Lutropin  $\beta$  shRNA (h) Lentiviral Particles: sc-39319-V.

Molecular Weight of Lutropin  $\beta$ : 22 kDa.

## 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<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) 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<sup>™</sup> Mounting Medium: sc-24941.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.