SANTA CRUZ BIOTECHNOLOGY, INC.

Lutropin β (C-6): sc-373941

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 testis 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. 8: 97-101.
2. Birken, S., et al. 1996. Metabolism of hCG and hLH to multiply urinary forms. Mol. Cell. Endocrinol. 125: 121-131.
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.

CHROMOSOMAL LOCATION

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

SOURCE

Lutropin β (C-6) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 109-135 near the C-terminus of Lutropin of rat origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Lutropin β (C-6) is available conjugated to agarose (sc-373941 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-373941 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-373941 PE), fluorescein (sc-373941 FITC), Alexa Fluor® 488 (sc-373941 AF488), Alexa Fluor® 546 (sc-373941 AF546), Alexa Fluor® 594 (sc-373941 AF594) or Alexa Fluor® 647 (sc-373941 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-373941 AF680) or Alexa Fluor® 790 (sc-373941 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-373941 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

STORAGE

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

APPLICATIONS

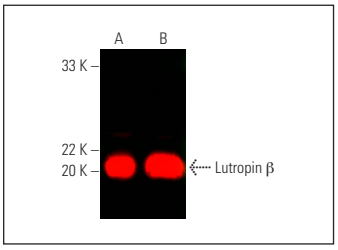
Lutropin β (C-6) is recommended for detection of Lutropin β of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), 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).

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.

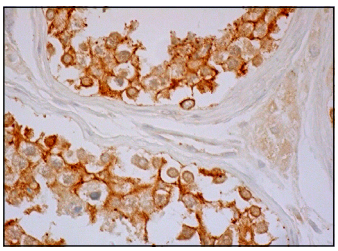
Molecular Weight of Lutropin β: 22 kDa.

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

DATA



Lutropin β (C-6): sc-373941. Near-Infrared western blot analysis of Lutropin β expression in mouse pituitary gland (**A**) and rat pituitary gland (**B**) tissue extracts. Blocked with UltraCruz® Blocking Reagent: sc-516214. Detection reagent used: m-IgGκ BP-CFL 790: sc-516181.



Lutropin β (C-6): sc-373941. Immunoperoxidase staining of formalin fixed, paraffin-embedded human testis tissue showing cytoplasmic and membrane staining of cells in seminiferous ducts.

SELECT PRODUCT CITATIONS

1. Guo, Y., et al. 2021. miR-29a/b1 regulates the luteinizing hormone secretion and affects mouse ovulation. Front. Endocrinol. 12: 636220.
2. Molina, E.M., et al. 2021. Effects of different DDE exposure paradigms on testicular steroid hormone secretion and hepatic oxidative stress in male Long-Evans rats. Gen. Comp. Endocrinol. 317: 113963.

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.