# SANTA CRUZ BIOTECHNOLOGY, INC.

# LHR (K-15): sc-26341



## BACKGROUND

Lutropin (also designated luteinizing hormone) plays a role in spermatogenesis and ovulation by stimulating the testes and ovaries to produce steroids. Gonadotropin (also designated choriogonadotropin) production in the placenta maintains estrogen and progesterone levels during the first trimester of pregnancy. Ovaries and testes abundantly express luteinizing hormone/choriogonadotropin receptor (LHR) as a seven transmembrane, G protein-coupled receptor glycoprotein. LHR influences the protective effect of pregnancy and Gonadotropin against breast cancer. The expression of LHR on breast carcinoma correlates in part to the degree of tumor differentiation. LHRpositive breast tumors occur more frequently in tumors with greater cell differentiation in premenopausal women. The gene encoding human LHR maps to chromosome 2p16.3.

## CHROMOSOMAL LOCATION

Genetic locus: LHCGR (human) mapping to 2p16.3; Lhcgr (mouse) mapping to 17 E4.

#### SOURCE

LHR (K-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of LHR of human origin.

#### PRODUCT

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

Blocking peptide available for competition studies, sc-26341 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

# APPLICATIONS

LHR (K-15) is recommended for detection of LHR of human and, to a lesser extent, mouse and rat 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), 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).

LHR (K-15) is also recommended for detection of LHR in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for LHR siRNA (h): sc-40105, LHR siRNA (m): sc-40106, LHR shRNA Plasmid (h): sc-40105-SH, LHR shRNA Plasmid (m): sc-40106-SH LHR shRNA (h) Lentiviral Particles: sc-40105-V and LHR shRNA (m) Lentiviral Particles: sc-40106-V.

Molecular Weight of LHR: 85 kDa.

#### **RESEARCH USE**

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

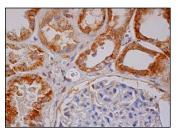
### PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

#### **STORAGE**

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

## DATA



LHR (K-15): sc-26341. Immunoperoxidase staining of formalin fixed, paraffin-embedded human kidney tissue showing cytoplasmic staining of cells in tubules

## SELECT PRODUCT CITATIONS

- Phillips, R.J., et al. 2005. Regulation of expression of the chorionic Gonadotropin/luteinizing hormone receptor gene in the human myometrium: involvement of specificity protein-1 (Sp1), Sp3, Sp4, Sp-like proteins, and histone deacetylases. J. Clin. Endocrinol. Metab. 90: 3479-3490.
- Welle, M.M., et al. 2006. Immunohistochemical localization and quantitative assessment of GnRH-, FSH-, and LH-receptor mRNA expression in canine skin: a powerful tool to study the pathogenesis of side effects after spaying. Histochem. Cell. Biol. 126: 527-535.
- Ponglowhapan, S., et al. 2007. Luteinizing hormone and follicle-stimulating hormone receptors and their transcribed genes (mRNA) are present in the lower urinary tract of intact male and female dogs. Theriogenology 67: 353-366.
- 4. Pidoux, G., et al. 2007. Biochemical characterization and modulation of LH/CG-receptor during human trophoblast differentiation. J. Cell. Physiol. 212: 26-35.
- Ponglowhapan, S., et al. 2008. Differences in the expression of luteinizing hormone and follicle-stimulating hormone receptors in the lower urinary tract between intact and gonadectomised male and female dogs. Domest. Anim. Endocrinol. 34: 339-351.
- Evans, J., et al. 2009. Prokineticin 1 mediates fetal-maternal dialogue regulating endometrial leukemia inhibitory factor. FASEB J. 23: 2165-2175.
- Montaño, E., et al. 2009. Association between leptin, LH and its receptor and luteinization and progesterone accumulation (P4) in bovine granulosa cell *in vitro*. Reprod. Domest. Anim. 44: 699-704.

MONOS Satisfation Guaranteed

Try **LHR (8G9A2): sc-293165**, our highly recommended monoclonal alternative to LHR (K-15).