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LH-beta (Luteinizing Hormone-beta) Antibody - With BSA and Azide

Mouse Monoclonal Antibody [Clone LHb/1214]
Catalog # AH11748

Product Information

Application	IHC, IF, FC
Primary Accession	P01229
Other Accession	3972, 154704
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG1, kappa
Clone Names	LHb/1214
Calculated MW	15345

Additional Information

Gene ID	3972
Other Names	Lutropin subunit beta, Lutropin beta chain, Luteinizing hormone subunit beta, LH-B, LSH-B, LSH-beta, LHB
Application Note	IHC~~1:100~500 IF~~1:50~200 FC~~1:10~50
Storage	Store at 2 to 8°C.Antibody is stable for 24 months.
Precautions	LH-beta (Luteinizing Hormone-beta) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	LHB
Function	Promotes spermatogenesis and ovulation by stimulating the testes and ovaries to synthesize steroids.
Cellular Location	Secreted.
Tissue Location	Pituitary gland.

Background

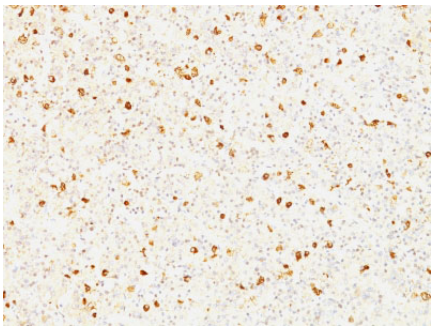
Luteinizing hormone (LH) is a glycoprotein. Each monomeric unit is a sugar-like protein molecule; two of

these make the full, functional protein. Its structure is similar to the other glycoproteins, follicle-stimulating hormone (FSH), thyroid-stimulating hormone (TSH), and human chorionic gonadotropin (hCG). The protein dimer contains 2 polypeptide units, labeled alpha and beta subunits that are connected by two bridges. The alpha subunits of LH, FSH, TSH, and hCG are identical, and contain 92 amino acids. The beta subunits vary. LH has a beta subunit of 121 amino acids (LHB) that confers its specific biologic action and is responsible for interaction with the LH receptor. This beta subunit contains the same amino acids in sequence as the beta subunit of hCG and both stimulate the same receptor; however, the hCG beta subunit contains an additional 24 amino acids and the hormones differ in the composition of their sugar moieties. LH is synthesized and secreted by gonadotrophs in the anterior lobe of the pituitary gland. In concert with the other pituitary gonadotropin follicle-stimulating hormone (FSH), it is necessary for proper reproductive function. In the female, an acute rise of LH levels triggers ovulation. In the male, where LH has also been called Interstitial Cell-Stimulating Hormone (ICSH), it stimulates Leydig cell production of testosterone. LH is a useful marker in classification of pituitary tumors and the study of pituitary disease.

References

Couzinet, B., et al. 1993. The control of gonadotrophin secretion by ovarian steroids. Hum. Reprod. 2: 97-101

Images



Formalin-fixed, paraffin-embedded human Pituitary stained with LH-beta Monoclonal Antibody (LHb/1214).