

## 36-1397: Monoclonal Antibody to LH-beta (Luteinizing Hormone-beta)(Clone : LHb/1214)

Clonality :	Monoclonal
Clone Name :	LHb/1214
Application :	IHC
Reactivity :	Human
Gene :	LHB
Gene ID :	3972
Uniprot ID :	P01229
Format :	Purified
Alternative Name :	LHB
Isotype :	Mouse IgG1, kappa
Immunogen Information	Recombinant beta sub-unit of human LH

## Description

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.

## **Product Info**

Amount :	100 µg
Purification :	Affinity Chromatography
Content :	100 $\mu g$ in 500 $\mu l$ PBS containing 0.05% BSA and 0.05% sodium azide. Sodium azide is highly toxic.
Storage condition :	Store the antibody at 4°C; stable for 6 months. For long-term storage; store at -20°C. Avoid repeated freeze and thaw cycles.

## **Application Note**

Immunohistochemistry (Formalin-fixed) (1-2ug/ml; 30 min RT) (Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95&degC followed by cooling at RT for 20 minutes);



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