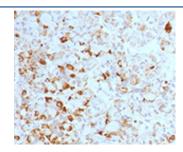


# Luteinizing Hormone beta Antibody [clone LHb/1214] (V2684)

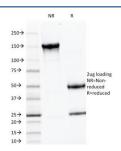
Catalog No.	Formulation	Size
V2684-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2684-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2684SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

# **Bulk quote request**

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	LHb/1214
Purity	Protein G affinity chromatography
UniProt	P01229
Localization	Cytoplasmic, secreted
Applications	Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT
Limitations	This Luteinizing Hormone beta antibody is available for research use only.



IHC testing of formalin-fixed, paraffin-embedded human pituitary stained with Luteinizing Hormone beta antibody (clone LHb/1214).



SDS-PAGE Analysis of Purified, BSA-Free Luteinizing Hormone beta Antibody (clone LHb/1214). Confirmation of Integrity and Purity of the Antibody.

## **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.

## **Application Notes**

Optimal dilution of the Luteinizing Hormone beta antibody should be determined by the researcher.

1. Staining of formalin-fixed tissues requires boiling tissue sections in 10mM Citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 min

#### **Immunogen**

Recombinant beta sub-unit of human LH was used as the immunogen for the Luteinizing Hormone beta antibody.

#### **Storage**

Store the Luteinizing Hormone beta antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).