

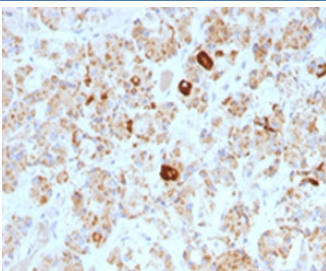
Luteinizing Hormone beta Antibody [clone SPM103] (V2685)

Catalog No.	Formulation	Size
V2685-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2685-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2685SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

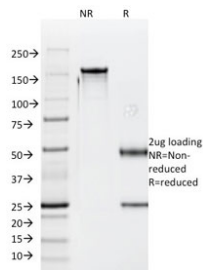
 Citations (3)

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Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	SPM103
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 SPM103).



SDS-PAGE analysis of purified, BSA-free Luteinizing Hormone beta antibody (clone SPM103) as confirmation of integrity and purity.

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 pH 9 10mM Tris with 1mM EDTA 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 2-8°C (with azide) or aliquot and store at -20°C or colder (without azide).