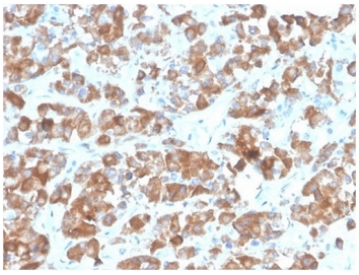
LH beta Antibody rLHb/1613 / Luteinizing Hormone beta Recombinant Monoclonal Antibody [clone rLHb/1613] (V9669)

Catalog No.	Formulation	Size
V9669-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V9669-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V9669SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

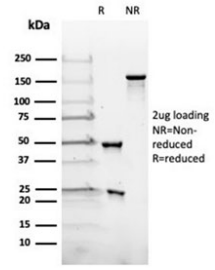
Recombinant | MOUSE MONOCLONAL

Bulk quote request

Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Recombinant Mouse Monoclonal
Isotype	Mouse IgG1, kappa
Clone Name	rLHb/1613
Purity	Protein A/G affinity
UniProt	P01229
Localization	Cytoplasm, Secreted
Applications	Immunohistochemistry (FFPE): 1-2ug/ml
Limitations	This LH beta Antibody rLHb/1613 / Luteinizing Hormone beta Recombinant Monoclonal Antibody is available for research use only.



LH beta Antibody by IHC in human pituitary. Immunohistochemical analysis of FFPE human pituitary tissue using LH beta Antibody rLHb/1613. Heat-induced epitope retrieval was performed by boiling tissue sections in 10 mM Tris with 1 mM EDTA, pH 9, for 20 minutes, followed by cooling before antibody staining.



LH beta Recombinant Monoclonal Antibody Purity by SDS-PAGE. SDS-PAGE analysis of purified, BSA-free LH beta Antibody rLHb/1613 to assess antibody integrity and purity.

Description

LH beta Antibody rLHb/1613 / Luteinizing Hormone beta Recombinant Monoclonal Antibody recognizes the beta subunit of luteinizing hormone, a glycoprotein hormone produced by gonadotroph cells of the anterior pituitary. Encoded by the LHB gene, this subunit associates with a common alpha subunit to form the biologically active hormone. The alpha subunit is shared with follicle-stimulating hormone, thyroid-stimulating hormone, and chorionic gonadotropin, while the beta subunit contributes to the structural characteristics that distinguish luteinizing hormone from other glycoprotein hormones.

Luteinizing hormone secretion is regulated by gonadotropin-releasing hormone released from the hypothalamus. Pulsatile stimulation of pituitary gonadotrophs promotes hormone synthesis and secretion, while feedback from gonadal steroids influences the activity of the hypothalamic-pituitary-gonadal axis. Once released into circulation, luteinizing hormone binds the luteinizing hormone/choriogonadotropin receptor, a G protein-coupled receptor that activates intracellular signaling pathways involved in steroid hormone production and reproductive function.

In the ovary, luteinizing hormone stimulates androgen production by theca cells and contributes to the endocrine environment required for follicular maturation. A pronounced increase in circulating luteinizing hormone during the reproductive cycle initiates ovulation and promotes luteinization of follicular cells. The resulting corpus luteum produces progesterone, which supports preparation of the endometrium for potential implantation. These processes depend on coordinated signaling between luteinizing hormone, follicle-stimulating hormone, and ovarian steroid hormones.

In the testes, luteinizing hormone acts primarily on Leydig cells to stimulate testosterone biosynthesis. Testosterone supports male reproductive development, secondary sexual characteristics, and the hormonal environment required for spermatogenesis. Disruption of luteinizing hormone synthesis, secretion, or receptor signaling can contribute to reproductive endocrine disorders. The LHB gene and its regulation are therefore important subjects in studies of pituitary function, gonadal steroidogenesis, and infertility.

Luteinizing hormone beta expression also provides information about gonadotroph differentiation and hormone production within the pituitary gland. Its detection can contribute to research examining endocrine cell populations and the classification of pituitary neoplasms. NSJ Bioreagents offers this LH beta Antibody for investigating gonadotropin expression, pituitary endocrine regulation, and the molecular mechanisms connecting hypothalamic signaling with reproductive physiology.

Explore our Luteinizing Hormone beta Antibody SPM103 for additional research tools targeting LHB and investigating pituitary gonadotroph differentiation and reproductive endocrine function.

Application Notes

Optimal dilution of the LH beta Antibody rLHb/1613 / Luteinizing Hormone beta Recombinant Monoclonal Antibody should be determined by the researcher.

Immunogen

Recombinant full-length human protein was used as the immunogen for the LH beta antibody.

Storage

Aliquot the LH beta antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

Luteinizing hormone beta antibody, LHB antibody, Lutropin beta antibody, Luteinizing hormone subunit beta antibody, Interstitial cell-stimulating hormone beta antibody

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