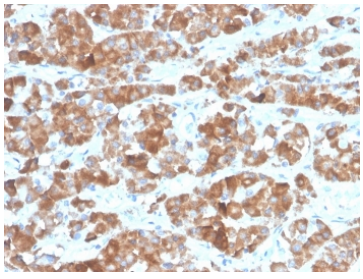
Recombinant Luteinizing Hormone beta Antibody LHb/1612R / LHB Rabbit MAb [clone LHb/1612R] (V9347)

Catalog No.	Formulation	Size
V9347-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V9347-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V9347SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

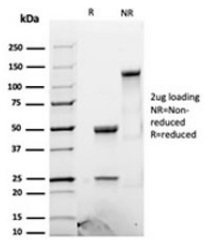
Recombinant RABBIT MONOCLONAL

Bulk quote request

Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	LHb/1612R
Purity	Protein A/G affinity
UniProt	P01229
Localization	Cytoplasm, Secreted
Applications	Immunohistochemistry (FFPE): 1-2ug/ml
Limitations	This Recombinant Luteinizing Hormone beta Antibody LHb/1612R is available for research use only.



Recombinant Luteinizing Hormone beta Antibody by IHC in human pituitary. Immunohistochemical staining of FFPE human pituitary tissue using clone LHb/1612R. Brown cytoplasmic immunoreactivity is observed in numerous pituitary cells, consistent with luteinizing hormone-producing gonadotrophs. Heat-induced epitope retrieval was performed by boiling sections in 10 mM Tris with 1 mM EDTA, pH 9, for 20 minutes, followed by cooling before staining.



Recombinant Luteinizing Hormone beta Antibody Purity by SDS-PAGE. SDS-PAGE analysis of purified, BSA-free recombinant Luteinizing Hormone beta Antibody LHb/1612R, with 2 ug of antibody loaded under reducing (R) and non-reducing (NR) conditions. The gel shows heavy and light chains under reducing conditions and intact antibody under non-reducing conditions.

Description

Recombinant Luteinizing Hormone beta Antibody LHb/1612R / LHB Rabbit MAb recognizes the beta subunit of luteinizing hormone (LH), a glycoprotein hormone synthesized by gonadotroph cells in the anterior pituitary gland. Encoded by the LHB gene, this subunit associates with the common glycoprotein hormone alpha subunit to form biologically active luteinizing hormone. The beta subunit contributes to hormone specificity and receptor recognition, distinguishing LH from other pituitary glycoprotein hormones, including follicle-stimulating hormone and thyroid-stimulating hormone.

Luteinizing hormone is an essential component of the hypothalamic-pituitary-gonadal axis, which coordinates reproductive endocrine activity. Its synthesis and secretion are stimulated by pulsatile release of gonadotropin-releasing hormone from the hypothalamus. Gonadal steroid hormones regulate this process through feedback mechanisms that influence hypothalamic and pituitary activity. Once released into circulation, LH binds the luteinizing hormone/choriogonadotropin receptor (LHCGR), activating intracellular signaling pathways that regulate steroid hormone biosynthesis and reproductive function.

In females, LH promotes androgen synthesis in ovarian theca cells, providing substrates for estrogen production by granulosa cells. During the reproductive cycle, a surge in LH secretion triggers ovulation and initiates luteinization of the ruptured follicle. The resulting corpus luteum produces progesterone, which supports the uterine environment during the luteal phase. These processes depend on coordinated regulation of LH, follicle-stimulating hormone, and ovarian steroid hormones.

In males, LH acts primarily on Leydig cells in the testes, stimulating testosterone production through cyclic AMP-dependent signaling. Testosterone supports male reproductive development, androgen-dependent physiological functions, and the hormonal environment required for spermatogenesis. Alterations in LH secretion, LHB expression, or receptor responsiveness can disrupt reproductive endocrine regulation and contribute to hypogonadism and infertility. These relationships make the LHB subunit important in studies of pituitary function and gonadal steroidogenesis.

Luteinizing hormone beta expression also serves as a marker of gonadotroph differentiation within the anterior pituitary. Its detection can contribute to investigations of pituitary endocrine cell populations and tumors exhibiting gonadotroph lineage characteristics. NSJ Bioreagents offers antibodies targeting LHB to support research into hormone synthesis, reproductive endocrine signaling, and the cellular mechanisms governing pituitary-gonadal communication.

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 Recombinant Luteinizing Hormone beta Antibody LHb/1612R / LHB Rabbit MAb should be determined by the researcher.

Immunogen

Recombinant full-length human LHB protein was used as the immunogen for the recombinant Luteinizing Hormone beta antibody.

Storage

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

Alternate Names

Luteinizing hormone beta antibody, LH beta antibody, LHB antibody, Lutropin beta antibody, Luteinizing hormone subunit beta antibody

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