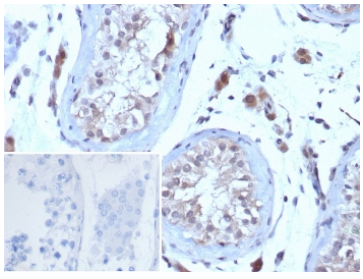
# Choriogonadotropin Receptor Antibody LHCGR/7398 / LH Receptor Monoclonal Antibody [clone LHCGR/7398] (V4890)

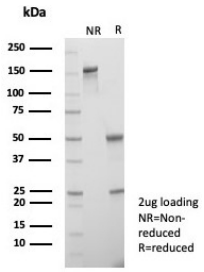
| Catalog No. | Formulation | Size |
|---|---|---|
| V4890-100UG | 0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide | 100 ug |
| V4890-20UG | 0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide | 20 ug |
| V4890SAF-100UG | 1 mg/ml in 1X PBS; BSA free, sodium azide free | 100 ug |

**Bulk quote request**

| | |
|---|---|
| **Species Reactivity** | Human |
| **Format** | Purified |
| **Host** | Mouse |
| **Clonality** | Monoclonal (mouse origin) |
| **Isotype** | Mouse IgG1, kappa |
| **Clone Name** | LHCGR/7398 |
| **Purity** | Protein A/G affinity |
| **UniProt** | P22888 |
| **Localization** | Cytoplasm, Cell surface |
| **Applications** | Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT |
| **Limitations** | This Choriogonadotropin Receptor Antibody LHCGR/7398 / LH Receptor Monoclonal Antibody is available for research use only. |



Choriogonadotropin Receptor Antibody by IHC in human testis. Immunohistochemical staining of FFPE human testis tissue using Choriogonadotropin Receptor Antibody LHCGR/7398. Brown immunoreactivity is visible in cells within the seminiferous tubules, with additional staining in surrounding tissue. The inset shows a negative control in which PBS replaced the primary antibody. Heat-induced epitope retrieval was performed by boiling sections in 10 mM Tris with 1 mM EDTA, pH 9, for 20 minutes.




Choriogonadotropin Receptor Monoclonal Antibody Purity by SDS-PAGE. SDS-PAGE analysis of purified, BSA-free Choriogonadotropin Receptor Antibody LHCGR/7398, with 2 ug loaded per lane under non-reducing (NR) and reducing (R) conditions. The non-reducing lane shows intact antibody near 150 kDa, while the reducing lane shows heavy and light chains near 50 and 25 kDa, respectively.

## Description

Choriogonadotropin Receptor Antibody LHCGR/7398 / LH Receptor Monoclonal Antibody recognizes the luteinizing hormone/choriogonadotropin receptor, a G protein-coupled receptor encoded by the LHCGR gene. Also called the lutropin receptor or hCG receptor, this membrane glycoprotein mediates cellular responses to luteinizing hormone (LH) and human chorionic gonadotropin (hCG). LHCGR belongs to the glycoprotein hormone receptor family and contains a large extracellular ligand-binding domain, seven transmembrane segments, and intracellular regions responsible for coupling hormone recognition to cellular signaling.

Binding of LH or hCG activates receptor-associated G proteins, primarily stimulating the Gs-adenylyl cyclase pathway. Increased cyclic AMP production activates protein kinase A and promotes the expression and activity of proteins involved in steroid hormone biosynthesis. LHCGR can also engage beta-arrestin-dependent signaling and mitogen-activated protein kinase pathways. Receptor phosphorylation, internalization, and recycling influence signaling duration and responsiveness to repeated hormonal stimulation. These regulatory mechanisms help coordinate endocrine signals with changing physiological requirements.

In ovarian tissues, LHCGR is expressed by theca cells and becomes prominent in granulosa cells during later stages of follicular maturation. Receptor activation stimulates androgen production and contributes to the signaling events responsible for ovulation. Following the midcycle LH surge, LHCGR promotes luteinization and supports progesterone synthesis by the corpus luteum. During early pregnancy, placental hCG maintains corpus luteum activity through the same receptor, helping sustain progesterone production until the placenta assumes this endocrine function.

In the testes, LHCGR is expressed predominantly by Leydig cells, where LH-dependent signaling stimulates testosterone synthesis. Testosterone is essential for male reproductive development, androgen-dependent physiological functions, and maintenance of spermatogenesis. Genetic variants affecting LHCGR can alter receptor activity and contribute to reproductive endocrine disorders. Inactivating variants may impair gonadal steroidogenesis, while activating variants can produce hormone-independent signaling associated with certain forms of precocious puberty.

LHCGR expression has also been investigated in selected extragonadal tissues and hormone-responsive malignancies, although its functional significance outside established reproductive cell populations remains incompletely understood. Studies of receptor expression and regulation contribute to understanding reproductive endocrine physiology, cellular differentiation, and hormone-dependent signaling. NSJ Bioreagents offers this Choriogonadotropin Receptor Antibody for research examining gonadotropin receptor biology, steroidogenic regulation, and cellular responses to reproductive hormones.

Explore our Luteinizing Hormone Receptor Antibody LHCGR/7399 for additional research tools targeting LHCGR and investigating reproductive endocrine signaling and gonadal steroidogenesis.

## Application Notes

Optimal dilution of the Choriogonadotropin Receptor Antibody LHCGR/7398 / LH Receptor Monoclonal Antibody should be determined by the researcher.

## Immunogen

A recombinant partial protein sequence (within amino acids 100-300) from the human protein was used as the immunogen for the Choriogonadotropin Receptor antibody.

## Storage

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

## Alternate Names

Luteinizing Hormone Receptor antibody, hCG Receptor antibody, LH Receptor antibody, Lutropin Receptor antibody, LHR antibody


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