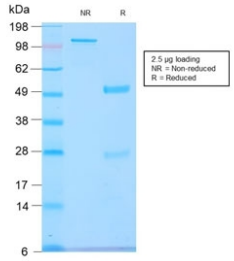
Recombinant GNRHR Antibody GNRHR/2982R / GnRH Receptor Rabbit Monoclonal Antibody [clone GNRHR/2982R] (V7814)

Catalog No.	Formulation	Size
V7814-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V7814-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V7814SAF-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, kappa
Clone Name	GNRHR/2982R
Purity	Protein A affinity chromatography
UniProt	P30968
Applications	ELISA (order BSA-free format for coating)
Limitations	This Recombinant GNRHR Antibody GNRHR/2982R / GnRH Receptor Rabbit Monoclonal Antibody is available for research use only.



SDS-PAGE analysis of purified, BSA-free Recombinant GNRHR Antibody GNRHR/2982R as confirmation of integrity and purity.

Description

Recombinant GNRHR Antibody GNRHR/2982R / GnRH Receptor Rabbit Monoclonal Antibody recognizes the gonadotropin-releasing hormone receptor, a member of the rhodopsin-like G protein-coupled receptor family encoded by

the GNRHR gene. Also known as the gonadoliberin receptor or luteinizing hormone-releasing hormone receptor, GNRHR mediates the effects of gonadotropin-releasing hormone (GnRH), a hypothalamic peptide that coordinates reproductive endocrine activity. The receptor is primarily expressed by gonadotroph cells in the anterior pituitary, where its activation regulates the synthesis and secretion of luteinizing hormone (LH) and follicle-stimulating hormone (FSH).

GNRHR contains seven transmembrane domains characteristic of G protein-coupled receptors. Binding of GnRH activates signaling primarily through Gq/11 proteins, stimulating phospholipase C beta and generating inositol trisphosphate and diacylglycerol. These second messengers promote intracellular calcium mobilization and protein kinase C activation, contributing to gonadotropin secretion and transcriptional regulation. Additional signaling through mitogen-activated protein kinase pathways influences gene expression and cellular responses to hormonal stimulation.

A distinctive feature of the mammalian type I GnRH receptor is its lack of a conventional intracellular C-terminal tail. This structural characteristic influences receptor internalization, desensitization, and intracellular signaling regulation. Physiological GnRH secretion occurs in pulses, with stimulation frequency affecting the relative production of LH and FSH. Sustained receptor stimulation can produce adaptive changes that suppress gonadotropin secretion, illustrating the importance of temporal signaling patterns in reproductive endocrine regulation.

GNRHR function is essential for normal sexual maturation and fertility. Inactivating variants in the receptor gene are associated with congenital hypogonadotropic hypogonadism, a condition involving deficient gonadotropin secretion and impaired reproductive development. Disease-associated mutations can affect receptor folding, membrane trafficking, ligand recognition, or downstream signaling. Studies of these variants have helped clarify relationships between receptor structure, cell-surface expression, and endocrine responsiveness.

Beyond the anterior pituitary, GNRHR expression has been investigated in reproductive tissues and several hormone-associated malignancies. Research involving ovarian, endometrial, and breast cancer models has explored potential relationships between GnRH receptor signaling, cellular proliferation, and responses to GnRH analogs. These findings remain dependent on biological context and experimental validation. NSJ Bioreagents offers this Recombinant GNRHR Antibody to support investigations of receptor expression, neuroendocrine communication, reproductive hormone regulation, and the molecular mechanisms underlying GnRH-dependent signaling.

For additional GNRHR research, explore our GnRH Receptor Antibody F1G4, a monoclonal antibody associated with published studies investigating GnRH receptor expression and signaling.

Application Notes

Optimal dilution of the Recombinant GNRHR Antibody GNRHR/2982R / GnRH Receptor Rabbit Monoclonal Antibody should be determined by the researcher.

Immunogen

Recombinant full-length human GNRHR protein was used as the immunogen for this recombinant GNRHR / LHCGR antibody.

Storage

Store the recombinant GNRHR / LHCGR antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

Recombinant GnRH receptor antibody, Recombinant gonadotropin-releasing hormone receptor antibody, Recombinant gonadoliberin receptor antibody, Recombinant LH-RH receptor antibody

Copyright © NSJ Bioreagents. All rights reserved.