

# GnRH-Receptor / LH-RH Receptor Antibody - With BSA and Azide

Mouse Monoclonal Antibody [Clone A9E4] Catalog # AH11340

## **Product Information**

Application IF, FC Primary Accession P30968

Other Accession 2798 (GNRHR) and 3973 (LHCGR), 407587 (GNRHR) 468490 (LHCGR)

**Reactivity** Human, Rabbit, Pig

**Host** Mouse **Clonality** Monoclonal

**Isotype** Mouse / IgG1, kappa

Clone Names A9E4
Calculated MW 37731

### Additional Information

**Gene ID** 2798

Other Names Gonadotropin-releasing hormone receptor, GnRH receptor, GnRH-R, GNRHR,

**GRHR** 

**Application Note** IF~~1:50~200 FC~~1:10~50

**Storage** Store at 2 to 8°C.Antibody is stable for 24 months.

**Precautions** GnRH-Receptor / LH-RH Receptor Antibody - With BSA and Azide is for

research use only and not for use in diagnostic or therapeutic procedures.

#### **Protein Information**

Name GNRHR

Synonyms GRHR

**Function** Receptor for gonadotropin releasing hormone (GnRH) that mediates the

action of GnRH to stimulate the secretion of the gonadotropic hormones luteinizing hormone (LH) and follicle-stimulating hormone (FSH). This receptor

mediates its action by association with G- proteins that activate a

phosphatidylinositol-calcium second messenger system. Isoform 2 may act as

an inhibitor of GnRH-R signaling.

**Cellular Location** Cell membrane; Multi-pass membrane protein.

Pituitary, ovary, testis, breast and prostate but not in liver and spleen

#### **Tissue Location**

## **Background**

Recognizes an epitope on the extracellular domain of gonadotropin releasing hormone (GnRH) receptor or luteinizing hormone receptor (LHCGR). Lutropin (also designated luteinizing hormone) plays a role in spermatogenesis and ovulation by stimulating the testes and ovaries to produce steroids. Gonadotropin (also designated choriogonadotropin) production in the placenta maintains estrogen and progesterone levels during the first trimester of pregnancy. Ovaries and testes abundantly express luteinizing hormone/choriogonadotropin receptor. GnRH receptor contains seven hydrophobic transmembrane domains connected by hydrophilic extracellular and intracellular loops characteristic of G-protein coupled receptors. GnRH stimulates the gonadotrophs of the anterior pituitary to secrete luteinizing hormone (LH) as well as follicle-stimulating hormone (FSH). GnRH influences the protective effect of pregnancy and Gonadotropin against breast cancer. The expression of GnRH on breast carcinoma correlates in part to the degree of tumor differentiation. GnRH-positive breast tumors occur more frequently in tumors with greater cell differentiation in premenopausal women. GnRH is present in luteal and granulosa cells as well as in ovarian cell membrane preparations.

## References

Karande AA; Rajeshwari K; Schol DJ; Hilgers JH. Establishment of immunological probes to study human gonadotropin-releasing hormone receptors. Molecular and Cellular Endocrinology, 1995, 114(1-2):51-6

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.