10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

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

Mouse Monoclonal Antibody [Clone F1G4; same as GNRH03]
Catalog # AH11338

Product Information

Application	IHC, IF, FC
Primary Accession	P30968
Other Accession	2798 (GNRHR) and 3973 (LHCGR), 407587 (GNRHR) 468490 (LHCGR)
Reactivity	Human, Rat, Rabbit, Pig
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG1, kappa
Clone Names	F1G4; same as GNRH03
Calculated MW	37731

Additional Information

Gene ID	2798
Other Names	Gonadotropin-releasing hormone receptor, GnRH receptor, GnRH-R, GNRHR, GRHR
Application Note	IHC~~1:100~500 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

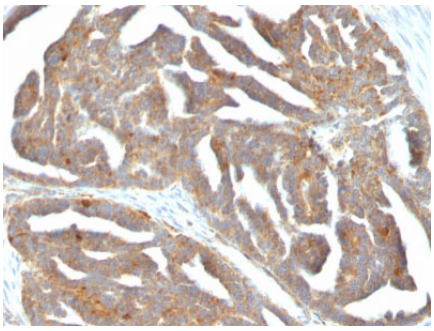
Background

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

Images



Formalin-fixed, paraffin-embedded human Ovarian Carcinoma stained with GnRH-Receptor Monoclonal Antibody (F1G4)