

Product name:	GnRH-R Rabbit Polyclonal Antibody
Cat number:	ABN11567
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	The antiserum was produced against synthesized peptide derived from human GNRHR. AA range:41-90
Reactivity:	Human,Mouse
Applications:	WB 1:500-1:2000,ICC/IF 1:200-1:1000,ELISA 1:5000-1:10000
Molecular Weight:	37kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

Background:

This gene encodes the receptor for type 1 gonadotropin-releasing hormone. This receptor is a member of the seven-transmembrane, G-protein coupled receptor (GPCR) family. It is expressed on the surface of pituitary gonadotrope cells as well as lymphocytes, breast, ovary, and prostate. Following binding of gonadotropin-releasing hormone, the receptor associates with G-proteins that activate a phosphatidylinositol-calcium second messenger system. Activation of the receptor ultimately causes the release of gonadotropic luteinizing hormone (LH) and follicle stimulating hormone (FSH). Defects in this gene are a cause of hypogonadotropic hypogonadism (HH). Alternative splicing results in multiple transcript variants encoding different isoforms. More than 18 transcription initiation sites in the 5' region and multiple polyA signals in the 3' region have been identified for this gene.

disease: Defects in GNRHR are a cause of fertile eunuch syndrome [MIM:228300]. Fertile eunuch syndrome is a mild phenotypic form of HH going with the presence of normal testicular size and some degree of spermatogenesis.

disease: Defects in GNRHR are a cause of idiopathic hypogonadotropic hypogonadism (IHH) [MIM:146110]. IHH is defined as a deficiency of the pituitary secretion of follicle-stimulating hormone and luteinizing hormone, which results in the impairment of pubertal maturation and of reproductive function.

function: Receptor for gonadotropin releasing hormone (GnRH) that mediate the action of GnRH to stimulate the secretion of the gonadotropic hormones (LH and 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.

similarity: Belongs to the G-protein coupled receptor 1 family.

tissue specificity: Pituitary, ovary, testis, breast and prostate but not in liver and spleen.