



## Anti-Gonadotropin-releasing hormone, Rabbit-Polyclonal Antibody

**Catalog No.** GB-10474

**Antigen species:** Human

**Host species:** Rabbit

**Quantity:** 100 $\mu$ g

**Reactivity:** Human

**Form:** Peptide affinity purified antibody

**Applications tested:** ELISA

### Target description

Gonadotropin-releasing hormone (GnRH) contains 10 amino acid residues and it stimulates the synthesis and secretion of follicle stimulating hormone (FSH) and luteinizing hormone (LH). GnRH secretion is pulsatile in all vertebrates, and is necessary for correct reproductive function. Thus, GNRH controls a complex process of follicular growth, ovulation, and corpus luteum maintenance in the female, and spermatogenesis in the male.

### Antigen

This polyclonal antibody was raised by immunizing rabbit with a synthetic peptide of GnRH.

### Application

The antibody titer is 500K for ELISA. It has not been tested in the other applications. However, for the first testing, we recommend 1/10,000 dilution for ELISA, 1/5000 dilution for Western blot analysis (WB) of recombinant protein, 1/2000 dilution for tissue extracts or cell lysates, 1/100 dilution for immunohistochemistry (IHC) staining on frozen cryosections, 1/50 dilution for IHC staining on paraffin embedded sections.

Ab dilution	Pre-bleed	Purified-Ab
1:0.1K	0.625	2.547
1:1K	0.16	2.178
1:10K	0.153	1.101
1:100K	0.146	0.377
1:1,000K	0.128	0.186
Titer		690K

### ELISA Protocol

Antigen is coated on EIA strips at 1 $\mu$ g per well. Add 200 $\mu$ l of blocking buffer and then wash wells with PBST buffer. Pre-bleed serum and peptide specific purified antibody GB-10474 is diluted in series as  $10^2 \sim 10^6$  folds and added in separate wells. Incubate antibody for 1hr. Wash unbound antibodies and add anti-rabbit IgG-HRP conjugate. Wash the plates and add substrate to develop color for 5 min. Read absorbance (ABS) at 650 nm. Amount of color is directly proportional to the amount of antibodies. Antibody titer is defined as  $>0.1$  of ABS of antiserum minus pre-bleed serum.

### Storage

It is supplied as peptide affinity purified antibody in lyophilized powder. Redissolve the powder with 100 microliter sterile water will restore to the original concentration 1mg/ml. Store at 4°C for short-term application. For long-term storage, aliquot and store at -20°C.

### References

1. Chia-Tse Hsu, Chun-Yuan Ting, Chun-Jen Ting, Tzong-Yueh Chen, Chia-Po Lin, Jacqueline Whang-Peng and Jaulang Hwang. Vaccination against gonadotropin-releasing hormone (GnRH) using toxin receptor-binding domain-conjugated GnRH repeats. *Cancer Research* 60, 3701-3705, July 15, 2000
2. Conn P. M., Hsueh A. J. W., Crowley W. F., Jr. Gonadotropin-releasing hormone: molecular and cell biology, physiology, and clinical applications. *Fed. Proc.* 43: 2351-2361, 1984