ALPHA DIAGNOSTIC INTERNATIONAL

Product Specification Sheet

Luteinizing Hormone Releasing Hormone (LHRH) Antibodies

Cat # LHRH11-P	Human LHRH Control Peptide	SIZE: 100 ug
Cat # LHRH11-S	Rabbit Anti-Human LHRH antiserum	SIZE: 100 ul
Cat # LHRH11-A	Rabbit Anti-Human LHRH IgG, aff pure	SIZE: 100 ug

Human reproduction is regulated by Luteinizing hormone releasing hormone (LHRH), also termed gonadotropin releasing hormone (GnRH). It is produced by hypothalamic neurons, secreted in a pulsatile manner into the capillary plexus of the median eminence and effects the release of luteinizing hormone and follicle stimulating hormone from gonadotropic cells in the anterior pituitary. The peptide may also influences other activities including behavioral ones, as LHRH or LHRH-like immunoreactivity has been found in gonadal tissue, placenta and the central nervous system, and exogenously administered LHRH is shown to affect behavior.

LHRH gene (chromosome 8q21) code for a protein of 92 amino acids (rat 92 aa and mouse 90 aa) in which the LHRH decapeptide is preceded by a signal peptide of 23 amino acids and followed by a Gly-Lys-Arg sequence, as expected for enzymatic cleavage of the decapeptide from its precursor and amidation of the carboxy-terminal of LHRH. In addition to the LHRH decapeptide, the prohormone contains a 56-amino acid peptide sequence which has been designated gonadotropin-releasing hormone associated peptide (GAP).

Source of Antigen and Antibodies

Human LHRH (pGlu HW SYG LRP G) (1) (**designated LHRH11-P, control peptide**) (1) was synthesized, coupled to KLH, and **polyclonal** antibodies generated in **rabbits**. Antibodies have been **affinity purified** over the control-peptide Sepharose.

Recommended 2-Ab

Goat Anti-rabbit IgG-HRP cat # 20320 (AP, biotin, FITC conjugates also available)

-ve control IgG

20009-1, Rabbit (non-immune) IgG, purified, suitable for ELISA, Western, IHC as –ve control

Form & Storage of Antibodies/Peptide Control

Antiserum (unpurified, undiluted)

100 ul/vial	50 ul/vial
solution	lyophilized powder

contains 0.05% sodium azide
Reconstitute in the original vol. of water

Affinity pure IgG

100 ug/100ul	50 ug/50 ul
solution	lyophilized powder

Buffer: 100 mM Tris, pH 7.5, 0.2% BSA
contains 0.05% sodium azide
Reconstitute in the original vol. of water

Control/blocking peptide

100 ug/100 ul	
solution	lyophilized powder

Buffer: PBS, pH 7.5 and 0.05% sodium azide
Reconstitute in the original vol. **O**f water

Storage

Short-term: unopened, undiluted vials for less than a week at 4oC.

Long-term: at –20C or below in suitable aliquots after reconstitution. Do not freeze and thaw and store working, diluted solutions.

Stability: 6-12 months at –20oC or below.
Shipping: 4oC for solutions and room temp for powder.

Recommended Usage

ELISA: Control peptide can be used to coat ELISA plates at 1 ug/ml and detected with antibodies (1:10-50K for neat serum and 0.5-1 ug/ml for affinity pure).

Immunohistochemistry: Not tested. We recommend the use of affinity pure antibodies at 2-20 ug/ml using paraformaldehyde fixed tissues.

Specificity & Cross-reactivity

The LHRH11-P peptide sequence is 100% conserved in mouse, rat, human, and other species LHRH. Antibody crossreactivity in various species is not established. Control peptide, because of its low mol. Wt (<3 kDa), is not suitable for Western. It should be used for ELISA or antibody blocking experiments (use 5-10 ug control peptide per 1 ug of aff pure IgG or 1 ul antiserum) to confirm antibody specificity (see detailed protocol at: www.4adi.com\data\abblock.html).

General References: 1. Hayflick JS et al (1989) Nucl. Acid Res. 17, 6403-6404; Adelman JP et al (1986) PNAS 83, 179-183; Seeburg PH et al (1984) Nature 311, 666-668; Tan L et al (1982) BBRC 109, 1061-1071; Bond Ct et al (1989) Mol Endocrinol. 3, 1257-1262; maiye Cc et al (1992) Cell. Mol. Neurobiol. 12, 447-454;Mason AJ et al (1986) Science 234, 1366-1371.

Citations of ADI's antibodies for Arginine Vasopressin Receptors (see updated list at www.4adi.com\flr\avpflr.html)

*This product is for In vitro research use only.

Related material available from ADI

Antibodies for AVP-V2 and AVP-V1a/b, Urotensin, UTR, Oxytosin,

Antibodies to AQP1-5, and Urea Transporter

LHRH11-S-A-P 80529A

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