

Product Specification Sheet

Human Prolactin Antibodies

Cat. # PRL11-A

Rabbit Anti-Human prolactin IgG (aff pure)
FORM: Soln Lyophilized.

SIZE: 100 ug

Prolactin (PRL) is a polypeptide hormone synthesized by the lactotropic cells of the anterior pituitary gland. Structurally, it is similar to two other polypeptide hormones namely, growth hormone and placental lactogen. PRL is a polypeptide hormone containing 199 amino acids, while growth hormone and placental lactogen each have 191 amino acids. There is about 100 ug of prolactin in the human pituitary gland, which is very small amount when compared to Growth hormone, which is present in 8-10 mg. Prolactin target organ is the breast (mammary gland). Its main physiological action is not only to initiate but also to sustain lactation. The hypothalamus secretes dopamine, which has a direct effect of inhibition on the secretion of PRL. If dopamine is not available or absent the secretion of PRL is autonomous. PRL increases during sleep and pregnancy. In women giving birth and they do not breast feed then PRL decreases to its normal level in a short time. During breast feed, PRL remains elevated for about 3 months. Also during pregnancy the size of the pituitary gland increases which is due to the proliferation of lactotropic cells.

Source of Antigen and Antibodies

Antigen	Purified prolactin from human pituitary glands)
Ab Host/type	Rabbit, Polyclonal, aff pure IgG (cat # PRL11-A) purified over Protein G-agarose column
2-ab	Goat Anti-rabbit IgG-HRP cat # 20320 (AP, biotin, FITC conjugates also available)
-ve control	Cat # 20009-1, Rabbit (non-immune) Serum IgG, purified, suitable for ELISA, Western, IHC as -ve control

Recommended Usage

Western Blotting (1-5ug/ml for affinity pure antibody using ECL technique).

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

Histochemistry & Immunofluorescence: no tested. We recommend the use of affinity purified antibody at 2-10 ug/ml in paraffin section and heat treatment.

Specificity & Cross-reactivity

Anti-Human PRL11-A antibodies crossreact with human prolactin. Antibody cross-reactivity in other species has not been studied.

General References: Aubert ML et al (1974) Acta Endocrinol. 77, 460; Cowden EA et al (1979) Annals Clin. Chem. 16, 1113; Frantz AG et al (1978) New Engl J. Med. 298, 201; Friesen H et al (1973) Ann. Rev. med. 24, 251; Jacobs LP et al (1974) J Clin. Endocrinol. 33, 996; Shome B et al (1977) J Clin. Endocrinol. Metabol. 45, 1112; Tyson JE et al (1972) Am. J. Obstet. Gynecol. 113, 14.

Form & Storage of Antibodies/Peptide Control

Affinity pure IgG
100 ug/100ul solution lyophilized powder
Supplied in **Buffer:** PBS+0.1% BSA
Reconstitute powder in PBS at 1mg/ml

Storage
Short-term: unopened, undiluted liquid vials at -20OC and powder at 4oC or -20oC..

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

*This product is for In vitro research use only.

Related material available from ADI

Human Prolactin ELISA kit

PRL11-A 70308A