

Product Specification Sheet

**Glucagon (GLGN) Antibodies**

Cat. # GLGN11-P	Human GLGN Control Peptide # 1	<b>SIZE:</b> 100 ug
Cat. # GLGN11-A	Rabbit Anti- Human GLGN Ig G # 1 (affinity pure)	<b>SIZE:</b> 100 ug

Glucagon is a member of a multigene family comprising of Secretin, Vasoactive Intestinal Peptide (VIP), Gastric Inhibitory Peptide (GIP) and others like Glicentin and Oxyntomodulin (OXM), which differs from glucagon by C-terminal octapeptide. The glucagon precursor contains at least 3 intervening sequences that divide the protein-coding portion into 4 regions corresponding to the signal peptide and part of the N-terminal peptide, the remainder of the N-terminal peptide and glucagon, glucagon-like peptide-1 (GLP1), and GLP2. The GLP 1 & 2 stimulates intestinal growth and up regulates villus height in the small intestine, concomitant with increased crypt cell proliferation and decreased enterocyte apoptosis. The two GLP's are mainly produced in the A cells of the Islets of Langerhans in response to a drop in blood sugar concentration.

**Glucagon (GLGN)** is a 29aa pancreatic hormone (chr 2q36), which together with insulin, is an important regulator of glucose metabolism. When in need of glucose, glucagon is secreted by the A cells of the pancreas and binds to target cell-surface receptors in the liver. The glucagons in Human, rabbit, rat, pig and cow are identical.

**Source of Antigen and Antibodies**

<b>Antigen</b>	8aa peptide of Human GLGN ; <b>Designated (GLGN11-P, control or blocking peptide) conjugated to KLH;</b> epitope location – mid region
<b>Ab Host/type</b>	Rabbit, polyclonal Aff pure IgG (cat # <b>GLGN11-A</b> ) purified over antigen-agarose column
<b>2-ab</b>	Anti-rabbit IgG-HRP cat # 20320 (AP, biotin, FITC conjugates also available)

**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

**Control/blocking peptide**

100 ug/100 ul solution lyophilized powder  
Supplied in **Buffer:** PBS pH 7.5,  
**Reconstitute powder in PBS at 1 mg/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

**Recommended Usage**

**Western Blotting** (1:1K-5K for neat serum and 1-10 ug/ml for affinity pure using Chemiluminescence technique). An antibody made to the ERAB11 epitope has detected ~ 27 kDa protein in the brain.

**ELISA** (1:10K-1:100K; using 50-100 ng of control peptide/well).

**Histochemistry & Immunofluorescence.** We recommend the use of affinity purified antibody at 10-30 ug/ml in formaldehyde fixed, paraffin-embedded tissues (1).

**Specificity & Cross-reactivity**

The hGLGN11-P control peptide shows 100% sequence homology with rat, rabbit, bovine, sheep, mouse, and pig glucagon precursor. Actual cross-reactivity of antibodies in various species has not been studied. The 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 the web site).

**General References:**

Thomsen J et al (1972) FEBS Lett. 21, 315-319; Drucker, D J et al (1988) JBC 263(27), 13475-478; Tsugita, A et al (1992) Eur J of biochemistry/ FEBS 206(31), 691-696.

\*This product is for In vitro research use only.

**Related material available from ADI**

Antibodies for Glucagon, GLP1 &2, GIP, Secretin, OXM and GRF.

GLGN11-A-P 71213J

**India Contact:**

**Life Technologies (India) Pvt. Ltd.**

306, Aggarwal City Mall, Opposite M2K Pitampura, Delhi – 110034 (INDIA). Ph: +91-11-42208000, 42208111, 42208222, Mobile: +91-9810521400, Fax: +91-11-42208444  
Email: [customerservice@lifetechindia.com](mailto:customerservice@lifetechindia.com) Website: [www.lifetechindia.com](http://www.lifetechindia.com)