

Glucagon like peptide 2 (GLP2) Antibodies

Cat. # GLP25-P	Human GLP2 Control Peptide # 2	SIZE: 100 ug
Cat. # GLP25-A	Rabbit Anti- Human GLP 2, Ig G # 2 (aff pure)	SIZE: 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.

GLP2, also a processed active peptide with 33aa, (chr 2q36-q37). GLP2 regulates gastric motility, gastric acid secretion, intestinal hexose transport, and increases the barrier function of the gut epithelium. It significantly enhances the surface area of the mucosal epithelium via stimulation of crypt cell proliferation. The actions of GLP2 are transduced by the GLP2 receptor, a G-protein-coupled receptor, activation of receptor signaling in heterologous cells promotes resistance to apoptotic injury in vitro, as such it may potentially be useful in treatment of injury and dysfunction of intestinal mucosal epithelium.

Source of Antigen and Antibodies

Antigen	8-aa peptide of Human GLP2 ; Designated (GLP25-P or control peptide/blocking peptide) conjugated to KLH epitope location ~ C-terminus, Cytoplasmic
Antibody host/type	Rabbit, Polyclonal IgG (Cat # GLP25-A), purified over antigen-Agarose
Secondary Ab	Cat # 20320, goat anti-rabbit IgG-HRP (AP, biotin, FITC conjugates also available).
Negative Control Ab	Non-immune rabbit IgG (Cat # 20009-1) to be used as -ve control for ELISA, WB, IHC etc.

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.

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 Human GLP25-P (8aa) control peptide is 100% conserved in mouse, rat, guinea pig and 88% in bovine. No significant sequence homology is detected with other proteins. Actual cross-reactivity of antibodies in various species has not been studied. The GLP25-P 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:

Suzuki A et al, PNA (April 2003); Yamamot H et al, J Neurosci (2003) 23(7) 2939-46; Yves Rouille, JBC (1995) 270 : 26488-96, Daniel, J. Drucker, (2001) Journal of Clinical Endocrinology and Metabolism, Vol. 86, No:4, 1759-1764.

*This product is for In vitro research use only.

Related material available from ADI

Antibodies for Glucagon, GIP, OXM, Secretin and GRF.

GLP25-A-P 71213J