

Product Specification Sheet

Glucagon like peptide 1 Receptor (GLP1R) Antibodies

Cat. # GLP1R11-P	Mouse GLP 1 Receptor Control Peptide # 1	SIZE: 100 ug
Cat. # GLP1R11-A	Rabbit Anti- Mouse GLP 1 Receptor Ig G # 1 (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.

GLP1 Receptor, a 489aa peptide in mouse, 463aa in rat and human (chr 6p21), it serves as receptor for GLP1. The activity of this receptor is mediated by G protein which activate adenyl cyclase. GLP1 Receptor is mainly expressed in pancreatic islets, stomach, and lung.

Source of Antigen and Antibodies

Antigen	17aa peptide of mouse GLP1 Receptor; Designated (GLP1R11-P or /blocking peptide) conjugated to KLH; Epitope location – mid region
Antibody host/type	Rabbit, Polyclonal IgG, purified over antigen-agarose (Cat # GLP1R11-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 17aa mouse GLP1R11-P control peptide is 100% conserved in human and rat. No significant sequence homology is detected with other proteins. Actual cross-reactivity of antibodies in various species has not been studied. The GLP1R11-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: Flamez, D. et al (1998) Diabetes 47 (4), 646-652; Thorens, B. (1992) PNAS 89 (18), 8641-8645; 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,

*This product is for In vitro research use only.

Related material available from ADI

Antibodies for Glucagon, GLP1&2, GLP Receptors 1&2, GIP, OXM, Secretin and GRF.

GLP1R11-A-P 71213J