ALPHA DIAGNOSTIC INTERNATIONAL

Product Specification Sheet

GRF Antibodies

Cat. # GRF12-P	Human GRF Control Peptide # 2	**SIZE**: 100 ug
Cat. # GRF12-A	Rabbit Anti- Human GRF 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 upregulates villus height in the small intestine, concomitant with increased crupt 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.

GRF (Growth hormone-releasing factor) 44 aa peptide (chr 20q11.2) with a mass of 13kD is released by the hypothalamus and acts on the adenohypophyse to stimulate the secretion of Growth Hormone, GRF is mainly secreted by pancreatic islet cells, its antagonists inhibit the growth of various cancers in vivo. This effect is exerted in part by endocrine mechanisms through the inhibition of growth hormone (GH) release from the pituitary.

Source of Antigen and Antibodies

Antigen	11aa peptide of Rat GRF; **Designated (GRF12-P or control peptide). epitope location ~ C-terminus**
Ab Host/type	Rabbit, polyclonal Aff pure IgG (**cat #GRF12-A**) purified over antigen-agarose column
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)
100ul solution lyophilized powder
Supplied 0.05% azide, **Reconstitute** powder in 100 ul PBS

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 (1-10 ug/ml for affinity pure IgG using Chemiluminescence 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: not tested. We recommend the use of affinity purified antibody at 2-10 ug/ml.

Specificity & Cross-reactivity

The hGRF12-P control peptide shows no significant sequence homology. Actual cross-reactivity of antibodies in various species has not been studied. The GRF12-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:
Mayo et al, Nature 314 (1985) 464-467; Gonzalez-Crespo et al (1991) PNA 88 (19), 8749-53; Srivastava, C. H et al (1995) Endocrinology, 136 (4), 1502-1508.

*This product is for In vitro research use only.

Related material available from ADI

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

GRF12-A-P 71222A

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