ALPHA DIAGNOSTIC INTERNATIONAL

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Product Specification Sheet

Mouse RELM-Gamma Antibodies

Cat. RELMG31-P	**Mouse** RELM-gamma control/blocking peptide # 1	**SIZE**: 100 ug
Cat. RELMG31-A	**Rabbit** Anti-Mouse RELM- gamma IgG (affinity pure)	**SIZE**: 100 ug
Cat. RELMG31-C	**Recombinant purified** Mouse RELM-Gamma protein for WB	**SIZE**: 100 ul

Resistance to insulin characterizes type 2 diabetes, the most common form of diabetes. There is a strong link between type 2 diabetes and obesity, as most patients tend to be obese. Thiozolidinediones (TZDs), a new class of anti-diabetic, enhances target-tissue sensitivity to insulin. A screen of genes down regulated by TZD in adipocyte led to the discovery of a new protein hormone called **resistin** (for resistance to insulin). Some other protein related to resistin has been called resistin-related molecules (**RELM-alpha and beta**). Resistin family of proteins was also identified as proteins (**FIZZ1-3**, for Found in Inflammatory zone) involved in allegory and inflammation.

RELM-alpha/FIZZ1/PMNG1 (Parasite-induced Macrophage Novel Gene 1 (prepeptides: mouse/rat 111 aa; ~77% identity) is 63% related to resistin at the C-terminus (38 aa). RELM-gamma is a novel member of the resistin-like molecule/found in inflammatory zone (RELM/FIZZ) family in mice and rats. Highest expression in hematopoietic tissues, suggesting a cytokine-like role for RELM-gamma. RELM-gamma-mRNA is detectable in bone marrow, spleen, and lung as well as in peripheral blood granulocytes. RELM-gamma (mouse 111/117 aa; rat 111 aa; Signal peptide 1-25 aa) is a secreted protein of ~11 kda).

Source of Antigen and Antibodies

Antigen	22-aa peptide from **mouse RELM-gamma (#**Q7TM98); **Designation (# RELMG31-P, control/blocking peptide**) conjugated to KLH; epitope location ~ N-terminus
Ab Host/type	Rabbit, Polyclonal IgG, purified over antigen-agarose (Cat # **RELMG31**-A)
2-Ab	Cat # 20320, goat anti-rabbit IgG-HRP (AP, biotin, FITC conjugates also available)
-ve control	# 20009-1, Rabbit (non-immune) IgG, purified, suitable for ELISA, Western, IHC as –ve control

Mouse RELM-gamma protein (mature 86-aa) was expressed as His-tag protein and purified (>95%). For Western blot +ve control (**Cat # RELMG31-C**) is supplied in SDS-PAGE sample buffer (reduced). Load 10 ul/lane of **RELMG31**-C for good visibility with antibody Cat # **RELMG31**-S. Store at –20oC in suitable size aliquots. SDS may crystallize in cold conditions. It should redissolve by warming before taking it from the stock. It should be heated once prior to loading on gels. If the product has been stored for several weeks, then it may be preferable to add 5 ul of fresh 2x sample buffer per 10 ul of the **RELMG31**-C solution prior to heating and loading on gels. This preparation is not biologically active. It is not suitable for ELISA or other applications where native protein is required. Do not freeze, thaw, or heat repeatedly

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.

Recommended Usage

Western Blotting 1:500-1:200 for antiserum and 1-5 ug/ml for affinity pure using Chemiluminescence technique.

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

Histochemistry & Immunofluorescence: Not tested.

Specificity & Cross-reactivity

Mouse RELMG31-P sequence is 100% conserved in rat RELM-alpha. No significant sequence RELMG31-P was found with resistin, RELM-alpha or RELM-beta. Antibody crossreactivity in various species is not established. We recommend the use of control peptide in antibody blocking experiments to establish antibody specificity. 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 see detailed protocol at the web site).

General References: Holcomb, IN (2000) EMBO J 19, 4046-4055; Steppan CM (2001) PNAS 98, 502-506; Banerjee RR (2001) JBC 276, 25970-25973

*This product is for in vitro research use only.

Related material available from ADI

Antibodies to FIZZ1-3, resistin, Acrp30 , leptin receptor, Acrp30, Leptin ELISA Kits

RELMG31-A-P-C 71213A

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