

Product Specification Sheet

**RELM-alpha/FIZZ1 Antibodies**

|                       |   |                     |
|-----------------------|---|---------------------|
| <b>Cat. RELMA11-P</b> | <b>Mouse</b> RELM-alpha control/blocking peptide # 1    | <b>SIZE:</b> 100 ug |
| <b>Cat. RELMA11-S</b> | <b>Rabbit</b> Anti-Mouse RELM-alpha antiserum # 1       | <b>SIZE:</b> 100 ul |
| <b>Cat. RELMA11-A</b> | <b>Rabbit</b> Anti-Mouse RELM-alpha IgG # 1 (aff pure)  | <b>SIZE:</b> 100 ug |
| <b>Cat. RELMA11-C</b> | Recombinant mouse RELM-Alpha protein for WB +ve control | <b>SIZE:</b> 100 ul |

**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). The N-terminus of RELM-alpha is less conserved at the N-terminus. RELM-alpha mRNA was most abundant in white adipose tissue. It is also expressed in mammary tissue with significant fat pads. Unlike resistin, RELM-alpha is not expressed in 3T3-L1 adipocyte or in preadipocytes. It is also found in heart, lung and tongue, where resistin is absent. FIZZ1 expression is induced hypertrophic, hyperplastic bronchial epithelium.

**FUNCTION:** Probable hormone.

**SUBCELLULAR LOCATION:** Secreted.

**SIMILARITY:** Belongs to the resistin/FIZZ family.

**Protein name** Resistin-like alpha [Precursor]

**Synonyms** RELMalpha

Cysteine-rich secreted protein FIZZ1

Parasite-induced macrophage novel gene 1 protein

Cysteine-rich secreted protein A12-gamma

**Gene name** Name: Retnla; Synonyms: Fizz1, Pmng1

**Affinity pure IgG**

100 ug/100ul solution lyophilized powder

Supplied in **Buffer:** PBS+0.1% BSA

**Reconstitute powder** in PBS at 1 mg/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 20°C and powder at 4°C or -20°C..

**Long-term:** at -20°C or below in suitable aliquots after reconstitution. Do not freeze and thaw and store working, diluted solutions.

**Stability:** 6-12 months at -20°C or below.

**Shipping:** 4°C for solutions and room temp for powder

**Source of Antigen and Antibodies**

|                     |   |
|---------------------|---|
| <b>Antigen</b>      | 14aa peptide from <b>mouse RELM-alpha (1)</b> ; (protein accession #Q9EP95 , refs 1) <b>Designation (# RELMA11-P, control/blocking peptide)</b> conjugated to KLH; Epitope location ~N-terminus |
| <b>Ab Host/type</b> | Rabbit, Polyclonal unpurified antiserum ( <b>#RELMA11-S</b> ) and IgG, purified over antigen-agarose (Cat # <b>RELMA11-A</b> )  |
| <b>2-Ab</b>         | Cat # 20320, <b>goat anti-rabbit IgG-HRP</b> (AP, biotin, FITC conjugates also available).  |
| <b>-ve control</b>  | # 20009-1, Rabbit (non-immune) IgG, purified, suitable for ELISA, Western, IHC as -ve control   |

Mouse RELMA11-C protein for Western blot +ve control (**Cat # RELMA11-C**) is supplied in SDS-PAGE sample buffer (reduced). Load 10 ul/lane of **RELMA11-C** for good visibility with antibody Cat # **RELMA11-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 **RELMA11-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. This preparation is intended for qualitative purpose and not to serve as standard of known concentration. Do not freeze/thaw repeatedly

**Form & Storage of Antibodies/Peptide Control**

**Antiserum (unpurified)**

100ul solution lyophilized powder

Supplied in **Buffer:** 0.05% azide

**Reconstitute powder** in 100 ul PBS

**Recommended Usage**

**Western Blotting** 1:500-1:2000 for antiserum and 1-5 ug/ml for affinity pure IgG using Chemiluminescence technique.

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

**Histochemistry & Immunofluorescence:** Not tested. We recommend the use of affinity purified antibody at 5-10 ug/ml in formaldehyde fixed tissue.

**Specificity & Cross-reactivity**

Mouse RELMA11-P sequence is only 50% conserved in rat and no appreciable homology with human RELM-alpha. We recommend the use of antibody Cat # RELMA12-S that is raised to human RELM-alpha sequence. No significant sequence RELMA11-P was found with resistin 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. Cat # **RELMA11-C** can be used positive control 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

**General References:** (1) Steppan CM et al (2001) Nature 409, 307; Steppan CM et al (2001) PNAS 98, 502; Holcomb IN et al (2000) EMBO J. 19, 4046-4055; Kim K-H et al (2001) JBC, 11252-11256

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

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