

## DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Mouse                                                                                                                                                                                                                                                                       |
| <b>Specificity</b>        | Detects mouse Resistin in direct ELISAs and Western blots. In this format, less than 2% cross-reactivity with recombinant human Resistin and recombinant mouse RELMβ is observed.                                                                                           |
| <b>Source</b>             | Polyclonal Goat IgG                                                                                                                                                                                                                                                         |
| <b>Purification</b>       | Antigen Affinity-purified                                                                                                                                                                                                                                                   |
| <b>Immunogen</b>          | <i>E. coli</i> -derived recombinant mouse Resistin (R&D Systems, Catalog # 1069-RN)<br>Ser21-Ser114<br>Accession # Q99P87                                                                                                                                                   |
| <b>Conjugate</b>          | Alexa Fluor 594<br>Excitation Wavelength: 590 nm<br>Emission Wavelength: 617 nm                                                                                                                                                                                             |
| <b>Formulation</b>        | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide<br><br>*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |

## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

|                             |                                                                        |
|-----------------------------|------------------------------------------------------------------------|
| <b>Western Blot</b>         | Optimal dilution of this antibody should be experimentally determined. |
| <b>Immunohistochemistry</b> | Optimal dilution of this antibody should be experimentally determined. |

## PREPARATION AND STORAGE

|                                |                                                                                                                   |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <b>Shipping</b>                | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. |
| <b>Stability &amp; Storage</b> | Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied                          |

## BACKGROUND

Resistin, also known as adipocyte-specific secretory factor (ADSF) and found in inflammatory zone 3 (FIZZ3), is a member of a family of secreted cysteine-rich peptide hormones that also includes Resistin-like molecules RELM alpha, beta, and gamma. These molecules play important roles in inflammation, glucose metabolism, and insulin resistance. Mature mouse Resistin is a 12 kDa protein with an N-terminal α-helical domain and a C-terminal β-sandwich domain that is stabilized by multiple intrachain disulfide bonds. Resistin circulates as noncovalent trimers and disulfide-linked hexamers, with the trimeric form showing greater bioactivity. Resistin can also form multimers with RELMβ. Mature mouse Resistin shares 56% and 72% amino acid (aa) sequence identity with human and rat Resistin, respectively. It shares 34% - 42% aa sequence identity with mouse RELMα, β, and γ. In rodents, Resistin is expressed by adipocytes and in the pituitary and arcuate nucleus of the hypothalamus. It is upregulated during adipogenesis, in obesity, and by insulin or a high carbohydrate diet. This is in contrast to human Resistin which is produced by macrophages and monocytes but not by adipocytes. Mouse Resistin induces proinflammatory molecule production in adipocytes and promotes hepatic gluconeogenesis and insulin resistance. Human Resistin promotes lipolysis by human and mouse adipocytes, but mouse Resistin does not promote lipolysis by adipocytes of either species. Both mouse and human Resistin promote vascular endothelial cell sprouting *in vitro* and inflammatory reactions *in vivo*.

## PRODUCT SPECIFIC NOTICES

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