

## 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 RELM $\beta$ 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) Ser21-Ser114 Accession # Q99P87
<b>Endotoxin Level</b>	<0.1 EU per 1 $\mu$ g of the antibody by the LAL method.
<b>Formulation</b>	Lyophilized from a 0.2 $\mu$ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

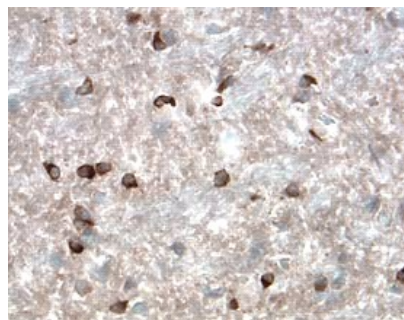
## APPLICATIONS

**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.

	Recommended Concentration	Sample
<b>Western Blot</b>	0.1 $\mu$ g/mL	Recombinant Mouse Resistin (Catalog # 1069-RN)
<b>Immunohistochemistry</b>	5-15 $\mu$ g/mL	See Below

## DATA

### Immunohistochemistry



**Resistin in Mouse Brain.** Resistin was detected in perfusion fixed frozen sections of mouse brain (caudate putamen) using 15  $\mu$ g/mL Mouse Resistin Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1069) overnight at 4 °C. Tissue was stained with the Anti-Goat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS008) and counterstained with hematoxylin (blue). View our protocol for [Chromogenic IHC Staining of Frozen Tissue Sections](#).

## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.2 mg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>• 1 month from date of receipt, 2 to 8 °C, reconstituted.</li> <li>• 6 months from date of receipt, -20 to -70 °C, reconstituted.</li> </ul>

## 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  $\alpha$ -helical domain and a C-terminal  $\beta$ -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 RELM $\beta$ . 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 RELM $\alpha$ ,  $\beta$ , and  $\gamma$ . 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*.