

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse Resistin in ELISAs and Western blots. In sandwich immunoassays, less than 0.05% cross-reactivity with recombinant human (rh) Resistin is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant mouse Resistin (R&D Systems, Catalog # 1069-RN) Ser21-Ser114 Accession # Q99P87
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with BSA as a carrier protein. 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
Western Blot	0.1 µg/mL	Recombinant Mouse Resistin (Catalog # 1069-RN)
Mouse Resistin Sandwich Immunoassay		Reagent
ELISA Capture	2-8 µg/mL	Mouse Resistin Antibody (Catalog # MAB1069)
ELISA Detection Standard	0.1-0.4 µg/mL	Mouse Resistin Biotinylated Antibody (Catalog # BAF1069) Recombinant Mouse Resistin (Catalog # 1069-RN)

PREPARATION AND STORAGE

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

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 (1, 2). 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 (3). Resistin circulates as noncovalent trimers and disulfide-linked hexamers, with the trimeric form showing greater bioactivity (3, 4). Resistin can also form multimers with RELM β (4). 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 α , β , and γ . In rodents, Resistin is expressed by adipocytes and in the pituitary and arcuate nucleus of the hypothalamus (5 - 9). It is upregulated during adipogenesis, in obesity, and by insulin or a high carbohydrate diet (5, 6). This is in contrast to human Resistin which is produced by macrophages and monocytes but not by adipocytes (9 - 12). Mouse Resistin induces proinflammatory molecule production in adipocytes and promotes hepatic gluconeogenesis and insulin resistance (5, 7). Human Resistin promotes lipolysis by human and mouse adipocytes, but mouse Resistin does not promote lipolysis by adipocytes of either species (10). Both mouse and human Resistin promote vascular endothelial cell sprouting *in vitro* and inflammatory reactions *in vivo* (13 - 16).

References:

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