Recombinant Human Resistin (rh Resistin)

Synonyms: Cysteine-rich secreted protein FIZZ3, Adipose tissue-specific secretory factor, ADSF, C/EBP-epsilon-regulated myeloid-specific secreted cysteine-rich protein, Cysteine-rich secreted protein A12-alpha-like 2, RSTN, XCP1, RETN1

Introduction: Resistin, a product of the RSTN gene, is a peptide hormone belonging to the class of cysteine-rich secreted proteins which is termed the RELM family. Human Resistin contains 108 amino acids as a prepeptide and its hydrofobic signal peptide is cleaved before its secretion. Resistin circulates in human blood as a dimeric protein consisting of two 92 amino acid polypeptides which are disulfide-linked via Cys26. Resistin may be an important link between obesity and insulin resistance. Mouse Resistin, specifically produced and secreted by adipocyte, acts on skeletal muscle myocytes, hepatocytes and adipocytes themselves so that it reduces their sensitivity to insulin. Steppan et al. have suggested that resistin suppresses the ability of insulin to stimulate glucose uptake. They have also suggested that resistin is present at elevated levels in blood of obese mice and is down regulated by fasting and antidiabetic drugs. On the other hand Way et al. have found that resistin expression is severly suppressed in obesity and is stimulated by several antidiabetic drugs. Other studies have shown that mouse Resistin increases during the differentiation of adipocytes, but it also seems to inhibit adipogenesis. In contrast, the human adipogenic differentiation is likely to be associated with a down regulation of resistin gene expression.

Description: Recombinant human Resistin produced in E.Coli is a protein containing 93 amino acid residues having a molecular mass of 9.9 kDa.

Source: Escherichia Coli

Physical Appearance: Sterile filtered white lyophilized (freeze-dried) powder.

Formulation: Lyophilized from a concentrated solution in 25 mM Tris, 25mM NaCl, pH-7.5. The aliquots/samples of 1µg contain Trehalose 5% (w/vol) for better recovery

Solubility: It is recommended to reconstitute the lyophilized rh Resistin in sterile H2O not less than 100 μ g/ml, which can then be further diluted to other aqueous solutions.

Stability: Lyophilized rh Resistin although stable at room temperature for 3 weeks, should be stored desiccated below -18° C. Upon reconstitution rh Resistin should be stored at 4° C between 2-7 days and for future use below -18° C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles

Purity: Greater than 98.0% as determined by SDS-PAGE.

Amino Acid Sequence: ASSKTLCSME EAINERIQEV AGSLIFRAIS SIGLECQSVT SRGDLATCPR GFAVTGCTCG SACGSWDVRA ETTCHCQCAG MDWTGARCCR VQP

Biological Activity: The biological activity was evidenced by the Resistin ability to prevent insulin-stimulated uptake of deoxy glucose in several cell lines at 10 ng/ml concentration.

This material is offered for <u>research use only</u>. Not for use in human. For in vitro use only. ImmunoTools will not be held responsible for patent infringement or other violations that may occur with the use of our products.

small	5 µg	Cat.N°	11344080
medium	25 µg	Cat.N°	11344084