

**California Bioscience** 

## **Product Datasheet**

Product Name	Resistin Human Recombinant
Cata No	CB500358
Source	Escherichia Coli.
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, MGC126603,
	MGC126609.

#### Description

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, and is also described as ADSF (Adipose Tissue-Specific Secretory Factor) and FIZZ3 (Found in Inflammatory Zone). 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. Way et al., on the other hand, 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.

9.9 kDa protein containing 93 amino acid residues. 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.

#### Purity

Greater than 98% as determined by SDS-PAGE.

#### Formulation

Sterile filtered and lyophilized from 0.5 mg/ml in 25 mM Tris, 25mM NaCl, pH-7.5.

#### Stability

Store lyophilized protein at -20°C. Aliquot the product after reconstitution to **avoid repeated freezing/thawing cycles**. Reconstituted protein can be stored at 4°C for a limited period of time; it does not show any change after two weeks at 4°C. The lyophilized protein remains stable until the expiry date when stored at -20°C.

### \* For Non-Clinical Research Use Only \*



# **Product Datasheet**

\* For Non-Clinical Research Use Only \*