

**APA847Hu61 100µg  
Active Resistin (RETN)**

**Organism Species: *Homo sapiens (Human)***

***Instruction manual***

FOR RESEARCH USE ONLY

NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

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12th Edition (Revised in Aug, 2016)

## **[ PROPERTIES ]**

**Source:** Eukaryotic expression.

**Host:** 293F cell

**Residues:** Lys19~Pro108

**Tags:** N-terminal His Tag and C-terminal Fc Region of Human IgG1

**Purity:** >95%

**Endotoxin Level:** <1.0EU per 1µg (determined by the LAL method).

**Buffer Formulation:** PBS, pH7.4, containing 5% trehalose.

**Original Concentration:** 200µg/mL

**Applications:** Cell culture; Activity Assays.

(May be suitable for use in other assays to be determined by the end user.)

**Predicted isoelectric point:** 5.7

**Predicted Molecular Mass:** 36.8kDa

**Accurate Molecular Mass:** 37kDa as determined by SDS-PAGE reducing conditions.

## **[ USAGE ]**

Reconstitute in 10mM PBS (pH7.6) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

## **[ STORAGE AND STABILITY ]**

**Storage:** Avoid repeated freeze/thaw cycles.

Store at 2-8°C for one month.

Aliquot and store at -80°C for 12 months.

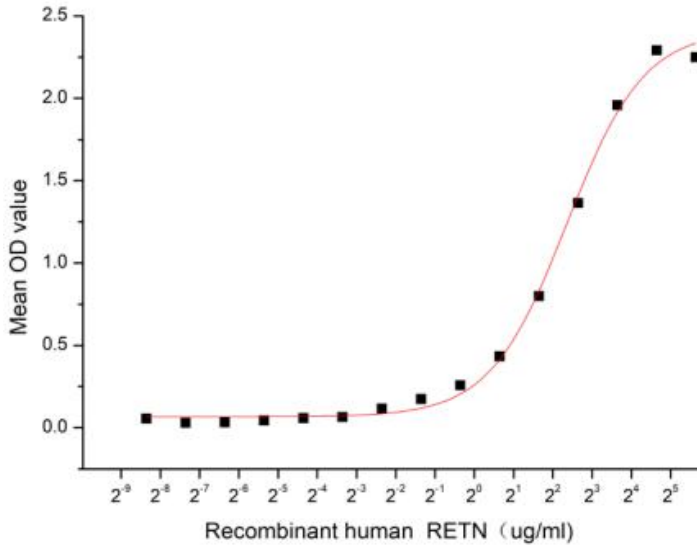
**Stability Test:** The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.

## **[ SEQUENCE ]**

KT LCSMEEAINE RIQEVAGSLI FRAISSIGLE  
CQSVTSRGDL ATCPRGFAVT GCTCGSACGS WDVRAETTCH CQCAGMDWTG  
ARCCRVQP

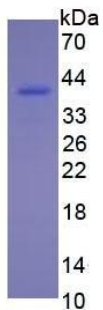
## **[ ACTIVITY ]**

Resistin (resistance-to-insulin, RETN) is a 10 kDa member of a small family of secreted cysteine-rich peptide hormones which also known as adipocyte-specific secretory factor (ADSF) and found in inflammatory zone 3 (FIZZ3). Human Resistin precursor is 108 amino acids (aa) in length. It contains an 18 aa signal sequence plus a 90 aa mature region. These molecules purportedly play some role in inflammation, glucose metabolism, and angiogenesis. Besides, Toll Like Receptor 4 (TLR4) has been identified as an interactor of RETN, thus a binding ELISA assay was conducted to detect the interaction of recombinant human RETN and recombinant human TLR4. Briefly, RETN was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100  $\mu$ l were then transferred to TLR4-coated microtiter wells and incubated for 1h at 37 °C . Wells were washed with PBST and incubated for 1h with anti-RETN pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody for 1h at 37 °C , wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37°C . Finally, add 50  $\mu$ L stop solution to the wells and read at 450/630nm immediately. The binding activity of RETN and TLR4 was shown in Figure 1, the ED50 for this effect is 5.13 ug/mL.



**Figure 1. The binding activity of recombinant human RETN with recombinant human TLR4**

**[ IDENTIFICATION ]**



**Figure 2. SDS-PAGE**

**Sample: Active recombinant RETN, Human**

**[ IMPORTANT NOTE ]**

The kit is designed for research use only, we will not be responsible for any issue if the kit was used in clinical diagnostic or any other procedures.