APA847Hu62 100μg
Active Resistin (RETN)
Organism Species: *Homo sapiens* (Human)
Instruction manual

FOR RESEARCH USE ONLY
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

13th Edition (Revised in Aug, 2023)

[PROPERTIES]

Source: Eukaryotic expression.
Host: 293F cell
Residues: Lys19~Pro108
Tags: N-terminal His Tag and C-terminal Fc Region of Human IgG1
Purity: >90%
Endotoxin Level: <1.0EU per 1μg (determined by the LAL method).
Buffer Formulation: PBS, pH7.4, containing 5% Trehalose .
Original Concentration: 200μg/mL
Applications: Activity Assays.
(May be suitable for use in other assays to be determined by the end user.)
Predicted isoelectric point: 5.8
Predicted Molecular Mass: 40.6kDa
Accurate Molecular Mass: 40kDa as determined by SDS-PAGE reducing conditions.

[USAGE]

Reconstitute in 10mM PBS (pH7.4) 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 37ºC 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]

KTLCSMEEAINERIQEVAGSLIFRAISSIGLECQSVTSRGDLATCPRGFAVTGCTCGSACGSWDVR AETTCHCQCAGMDWTGARCCRVQP

[ACTIVITY]

Resistin (RETN), named for its association with insulin resistance, is a cysteine-rich adipokine primarily secreted by immune cells like macrophages in humans, as well as by adipocytes in rodents. It plays a key role in promoting insulin resistance, inflammation, and endothelial dysfunction. Resistin is implicated in the pathogenesis of type 2 diabetes, obesity, and atherosclerosis by interfering with insulin signaling pathways and increasing the production of pro-inflammatory cytokines. Its circulating levels are often elevated in metabolic disorders, making it a potential biomarker and therapeutic target for these conditions. The mechanisms of action involve interactions with various receptors, such as Toll-like Receptor 4 (TLR4) and Adenylyl Cyclase-Associated Protein 1 (CAP1), leading to the activation of inflammatory signaling cascades.Besides,CFD has been identified as an interactor of RETN, thus a functional binding ELISA assay was conducted to detect the interaction of recombinant human RETN and recombinant human CFD . Briefly, biotin-linked RETN were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100μl were then transferred to CFD-coated microtiter wells and incubated for 1h at 37 ℃. Wells were washed with PBST 3 times and incubation with Streptavidin-HRP for 30min, then wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37 ℃. Finally, add 50μl stop solution to the wells and read at 450nm immediately. The binding activity of RETN and CFD was shown in Figure 1, the EC50 for this effect is 2.04126μg/mL.

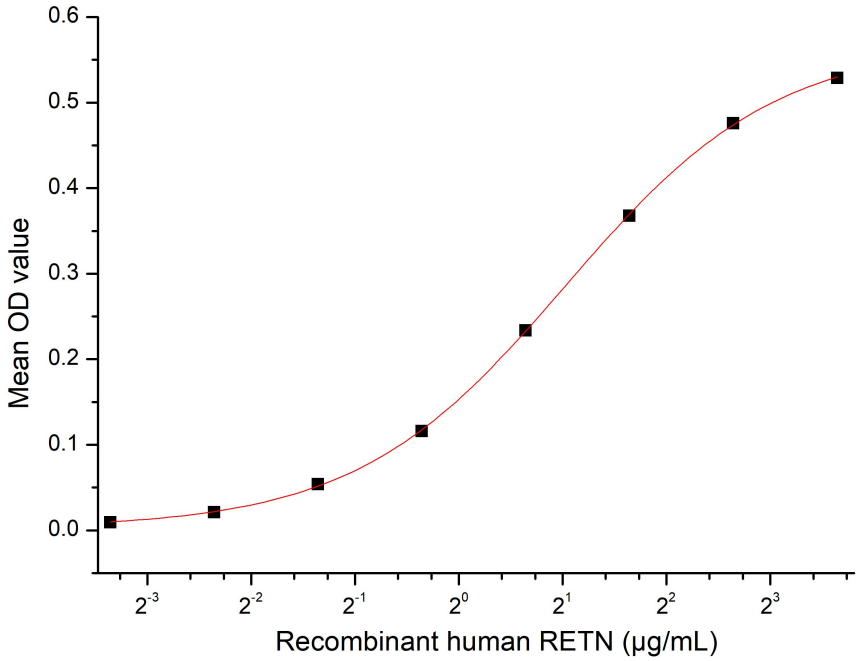


Figure 1. The binding activity of RETN and CFD

[IDENTIFICATION]

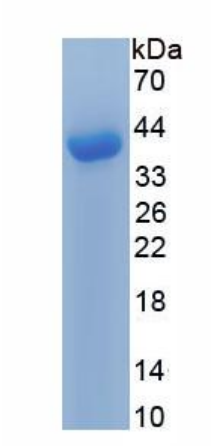


Figure 2. SDS-PAGE

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.