

## Anti-Human Adiponectin Antibody [PSH05-32] - BSA and Azide free (Detector)

# HA722261



<b>Product Type:</b>	Recombinant Rabbit monoclonal IgG, primary antibodies
<b>Species reactivity:</b>	Human
<b>Applications:</b>	ELISA(Det)
<b>Clone number:</b>	PSH05-32

**Description:** Adiponectin (also referred to as GBP-28, apM1, AdipoQ and Acrp30) is a protein hormone and adipokine, which is involved in regulating glucose levels and fatty acid breakdown. In humans, it is encoded by the ADIPOQ gene and is produced primarily in adipose tissue, but also in muscle and even in the brain. Adiponectin is a protein hormone that modulates a number of metabolic processes, including glucose regulation and fatty acid oxidation. Adiponectin is secreted from adipose tissue (and also from the placenta in pregnancy) into the bloodstream and is very abundant in plasma relative to many hormones. High adiponectin levels correlate with a lower risk of diabetes mellitus type 2. Plasma levels of adiponectin are lower in obese subjects than in lean subjects. Many studies have found adiponectin to be inversely correlated with body mass index in patient populations. However, a meta analysis was not able to confirm this association in healthy adults. Circulating adiponectin concentrations increase during caloric restriction in animals and humans, such as in patients with anorexia nervosa. Furthermore, a recent study suggests that adipose tissue within bone marrow, which increases during caloric restriction, contributes to elevated circulating adiponectin in this context.

**Immunogen:** Recombinant protein within human Adiponectin aa 19-244 (Q15848).

**Positive control:** Recombinant standard Human Adiponectin protein (HA210935).

**Subcellular location:** Secreted.

**Database links:** SwissProt: Q15848 Human

**Recommended Dilutions:**

**ELISA(Det)** Use at an assay dependent concentration. Can be paired for Sandwich ELISA with Rabbit monoclonal [PSH05-31] to Human Adiponectin (Capture) (HA722260) and Recombinant Human Adiponectin protein (HA210935) as the standard. The reference range value is 61.7-5000pg/ml.

**Storage Buffer:** PBS (pH7.4).

**Storage Instruction:** Store at +4℃ after thawing. Aliquot store at -20℃. Avoid repeated freeze / thaw cycles.

**Purity:** Protein A affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

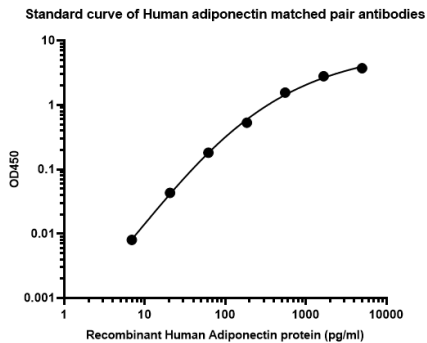
Service mail:support@huabio.cn

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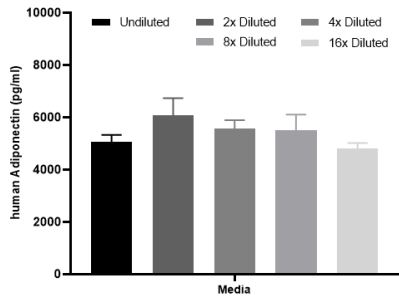
Applications:WB=Western blot IHC-P=Immunohistochemistry (paraffin) IF-Cell=Immunofluorescence (Cell) IF-Tissue=Immunofluorescence (Tissue) FC=Flow cytometry IP=Immunoprecipitation

Images

**Fig1:** Sandwich ELISA analysis of Human adiponectin matched pair antibodies

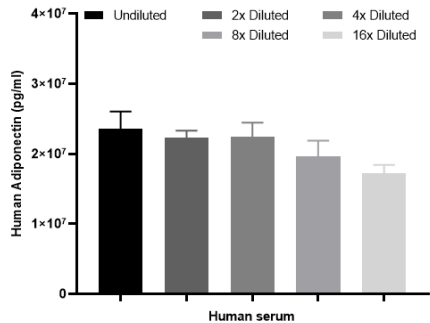


Elisa assay was performed by coating wells of a 96-well plate with 100  $\mu$ l per well of capture antibody (HA722260) diluted in carbonate/bicarbonate buffer, at a concentration of 2  $\mu$ g/ml overnight at 4 $^{\circ}$ C. Wells of the plate were washed, blocked with 150  $\mu$ l 0.05% tween-20 1%BSA blocking buffer, and incubated with serial diluted Recombinant standard Human Adiponectin protein (HA210935) starting from 5000 pg/ml to 0 pg/ml and detect antibody (HA722261, Biotin, 0.2  $\mu$ g/ml) for 1 hour at 30 $^{\circ}$ C with shaking. Then the plate was washed and incubated with 100  $\mu$ l per well of SA-HRP for 0.5 hour at 30 $^{\circ}$ C with shaking. Detection was performed using an Ultra TMB Substrate for 10 minutes at room temperature in the dark. The reaction was stopped with sulfuric acid and absorbances were read on a spectrophotometer at 450 nm.



**Fig2:** Interpolated concentrations of spiked Adiponectin in human cell culture media samples.

The concentrations of Adiponectin were measured in duplicates, interpolated from the Adiponectin standard curves and corrected for sample dilution. Undiluted samples are as follows: cell culture media 50%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2).



**Fig3:** Interpolated concentration of native Adiponectin was measured in duplicate at different sample concentrations. Undiluted samples were 1:20000 serum. The interpolated dilution factor corrected values were plotted (mean +/- SD, n=2).

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**Note:** All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

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### Background References

1. Zhao S et al. Adiponectin, Leptin and Cardiovascular Disorders. Circ Res. 2021 Jan
2. Choi HM et al. Multifaceted Physiological Roles of Adiponectin in Inflammation and Diseases. Int J Mol Sci. 2020 Feb

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