

# Active Adiponectin Receptor 1 (ADIPOR1) Instruction Manual

**SBPA091Hu02**

**Homo sapiens (Human)**

**Buffer Formulation**

20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.

**Traits**

Freeze-dried powder

**Purity**

> 97%

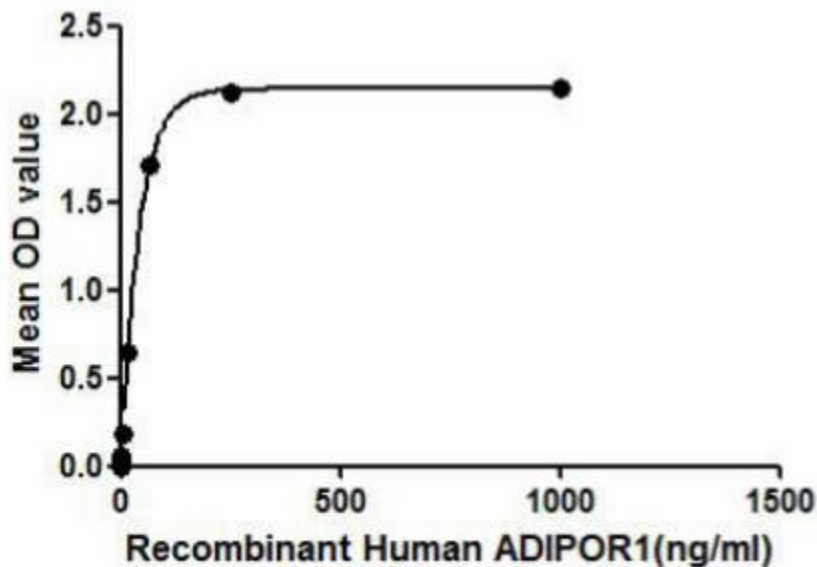
**Isoelectric Point**

5.4

**Applications**

Cell culture; Activity Assays.

**ACTIVITY TEST**



**Figure 1. The binding activity of ADIPOR1 with ADP.**

ADIPOR1 (Adiponectin receptor protein 1) is a receptor for ADP (30kDa adipocyte complement-related protein), an essential hormone secreted by adipocytes that regulates glucose and lipid metabolism. ADIPOQ-binding activates a signaling cascade that leads to increased AMPK activity, and ultimately to increased fatty acid oxidation, increased glucose uptake and decreased gluconeogenesis. Besides, human ADP and rat ADP exist similarities in amino acid sequence with the identity of 83.2%. Thus a binding ELISA assay was conducted to detect the interaction of recombinant human ADIPOR1 and recombinant rat ADP. Briefly, ADIPOR1 were diluted serially in PBS, with 0.01%BSA

(pH 7.4). Duplicate samples of 100uL were then transferred to ADP-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-ADIPOR1 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37°C. Finally, add 50µL stop solution to the wells and read at 450nm immediately. The binding activity of ADIPOR1 and ADP was shown in Figure 1, and this effect was in a dose dependent manner.

## **USAGE**

Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

## **STORAGE**

Avoid repeated freeze/thaw cycles. Store at 2-8°C for one month. Aliquot and store at -80°C for 12 months.

## **STABILITY**

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.

## **Image**

