

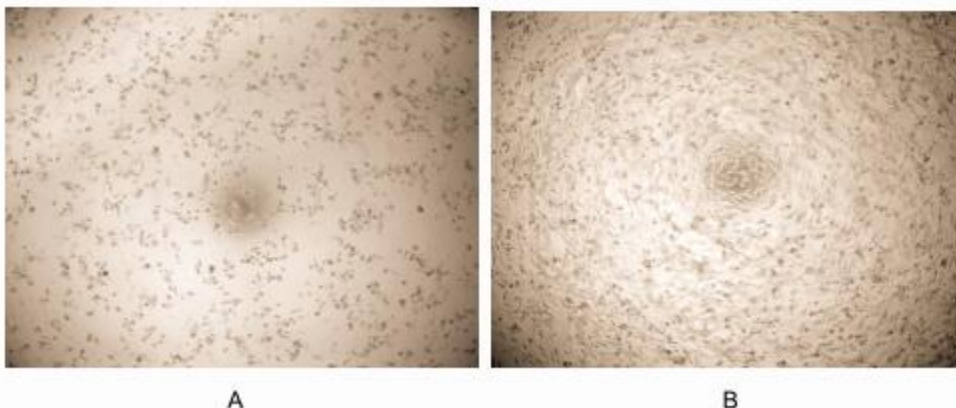
# Active Fibronectin Type III Domain Containing Protein 5 (FNDC5) Instruction Manual

**SBPN389Hu01**

**Homo sapiens (Human)**

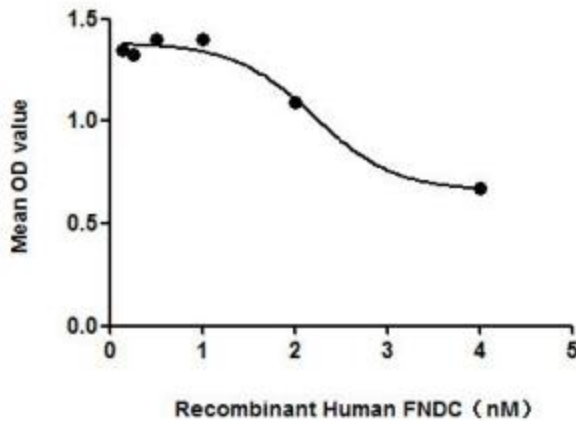
<b>Buffer Formulation</b>	20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
<b>Traits</b>	Freeze-dried powder
<b>Purity</b>	> 90%
<b>Isoelectric Point</b>	6.2
<b>Applications</b>	Cell culture; Activity Assays.

## ACTIVITY TEST



The protein encoded by FNDC5 can be cleaved into Irisin, which is a myokine linked to exercise and lean body mass. It was reported that FNDC5 significantly decreased cell number, migration and viability through apoptosis in malignant MDA-MB-231 cells. Thus MDA-MB-231 cells were seeded overnight at a density of 5,000 cells/well, and treated with or without various concentrations of FNDC5 for 48h, then MDA-MB-231 cells were observed by inverted microscope and cell viability was measured by Cell Counting Kit-8 (CCK-8). Briefly, 10 $\mu$ L of CCK-8 solution was added to each well of the plate, then measure the absorbance at 450nm using a microplate reader after incubating the plate for 1-4 hours in at 37oC. Cell apoptosis of MDA-MB-231 cells after incubation with FNDC5 for 48h observed by inverted microscope was shown in Figure 1. (A) MDA-MB-231 cells cultured in DMEM, stimulated with 4nM FNDC5 for 48h; (B) Unstimulated MDA-MB-231 cells cultured in DMEM for 48h.

Figure 1. Cell apoptosis of MDA-MB-231 cells after stimulated with FNDC5



Cell viability was assessed by CCK-8 (Cell Counting Kit-8 ) assay after incubation with various concentrations of FNDC5 for 48h. The dose-effect curve of FNDC5 was shown in Figure 2. It was obvious that FNDC5 significantly decreased cell viability of MDA-MB-231 cells. The ED50 for this effect is typically 1.72~2.70nM.

Figure 2. The dose-effect curve of FNDC5 on MDA-MB-231 cells

## USAGE

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

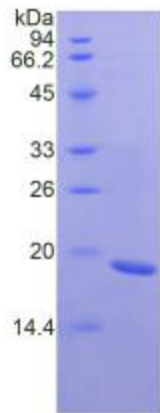
## STORAGE

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



SDS-PAGE Image

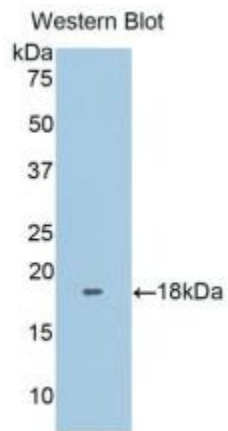


Figure. Western Blot; Sample: Recombinant FNDC5, Human.

**[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.