

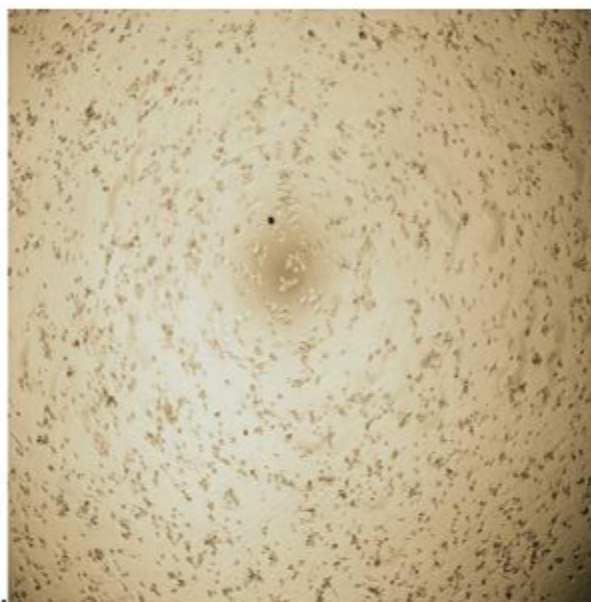
Active Fibronectin Type III Domain Containing Protein 5 (FNDC5) Instruction Manual

SBPN389Hu61

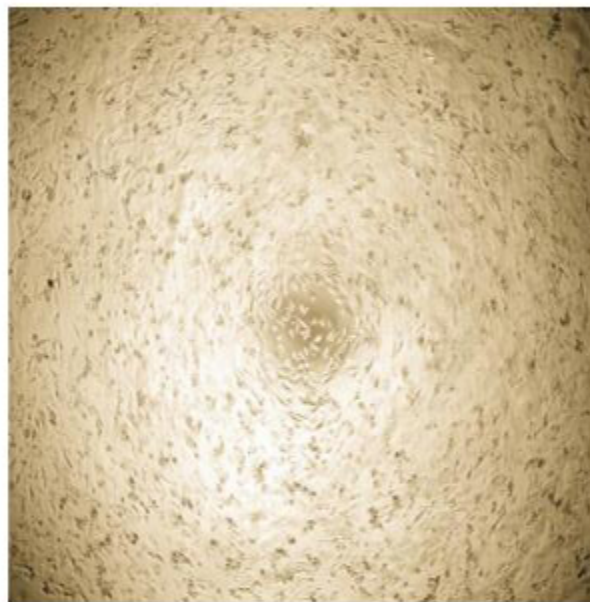
Homo sapiens (Human)

Buffer Formulation	PBS, pH7.6, containing 5% trehalose.
Traits	Freeze-dried powder
Purity	> 97%
Isoelectric Point	5.0
Applications	Cell culture; Activity Assays.

ACTIVITY TEST



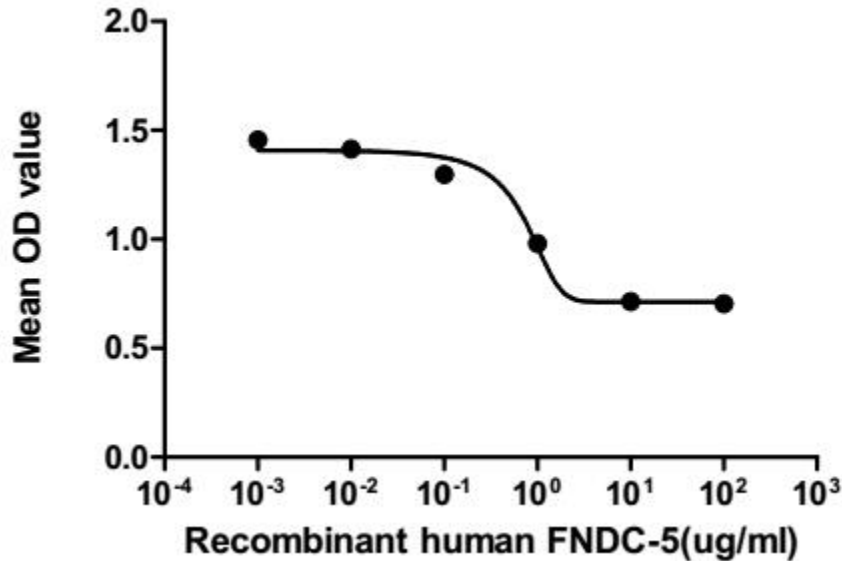
A



B

Fibronectin type III domain-containing protein 5, the precursor of irisin, is a protein that is encoded by the FNDC5 gene. 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 μ 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 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. Cell apoptosis of MDA-MB-231 cells after stimulated with FNDC5.



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 1.35~12.52ug/mL.
Figure. The dose-effect curve of FNDC5 on MDA-MB-231 cells.

USAGE

Reconstitute in PBS (pH7.6) 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

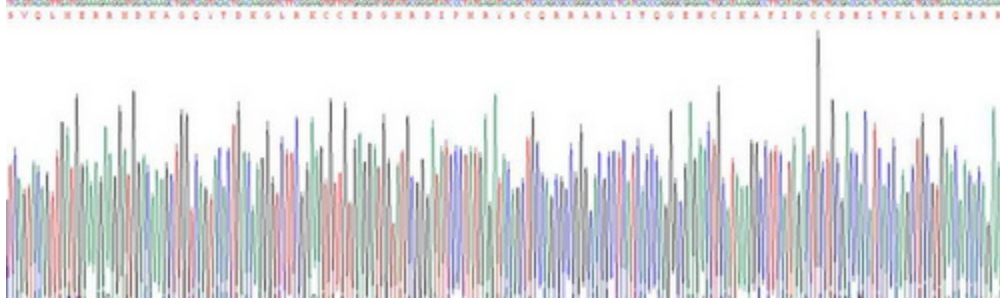


Figure. SDS-PAGE

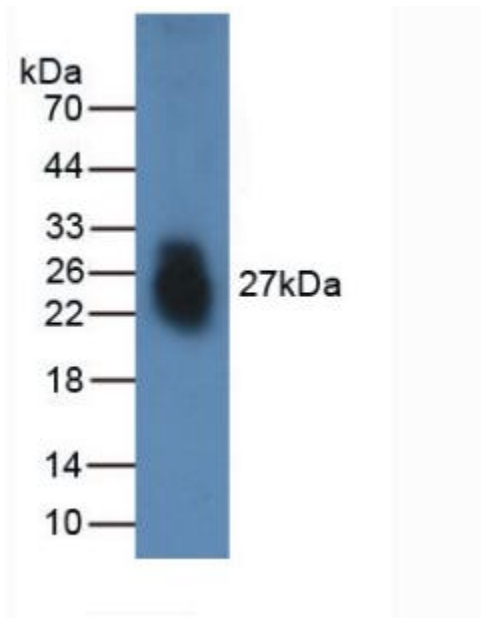


Figure. Western Blot; Sample: Recombinant FNDC5, Human.

[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.

