Active Prokineticin 2 (PK2) Instruction Manual

SBPA073Hu02

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	> 95%
Isoelectric Point	10.2
Applications	Cell culture; Activity Assays.

ACTIVITY TEST

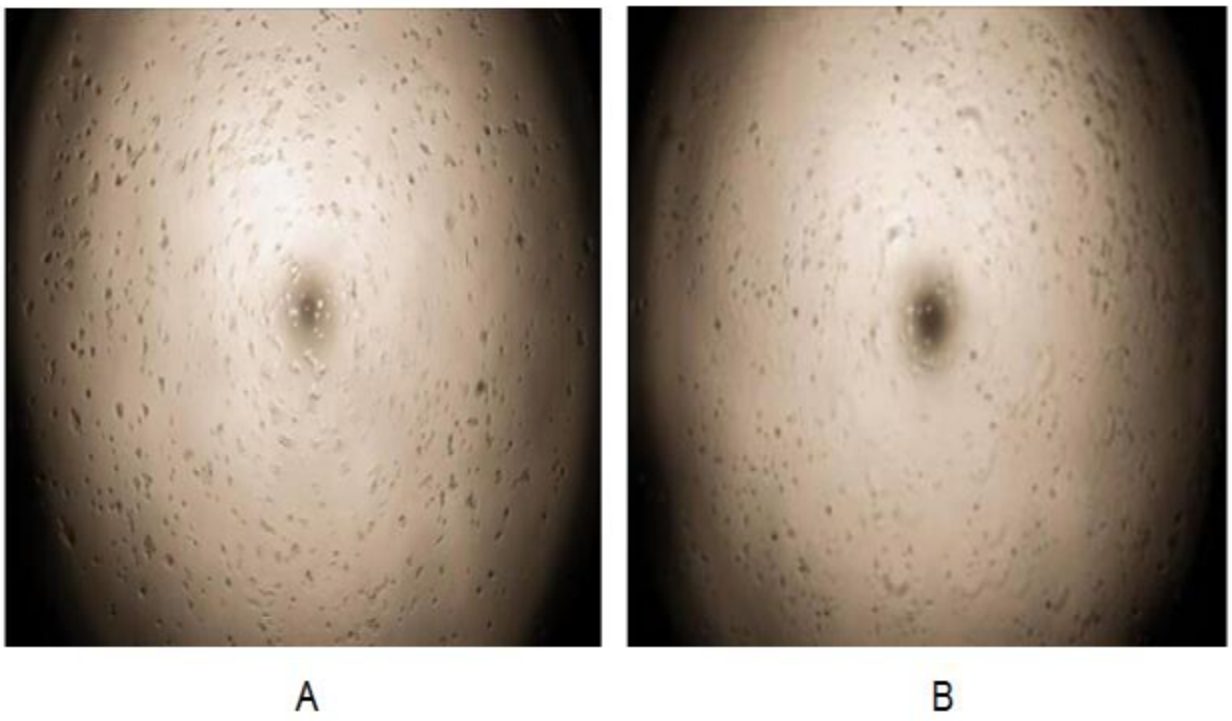

Figure. Cell proliferation of HCT116 cells after stimulated with PK2.
Prokineticin 2 (PK2) is a memeber of prokineticin family. Prokineticin is a secreted protein that potently contracts gastrointestinal smooth muscle. They are thought to be involved in several important physiological processes like neurogenesis, tissue development, angiogenesis, and nociception. Other important physiological roles the Bv8/Prokineticins (PKs) are involved in may include cancer, reproduction, and regulating

physiological functions that influence circadian rhythms like hormone secretion, ingestive behaviors, and the sleep/wake cycle. To test the effect of PK2 on cell proliferation, HCT116 colon cancer cells were seeded into triplicate wells of 96-well plates at a density of 5,000 cells/well and allowed to attach, replaced with serum-free overnight, then the medium was replaced with 2% serum standard DMEM containing various concentrations of recombinant human PK2. After incubated for 96h, cells were observed by inverted microscope and cell proliferation was measured by Cell Counting Kit-8 (CCK-8). Briefly, 10μL of CCK-8 solution was added to each well of the plate, then the absorbance at 450nm was measured using a microplate reader after incubating the plate for 1-4 hours at 37℃. Proliferation of HCT116 cells after incubation with PK2 for 96h observed by inverted microscope was shown in Figure 1. Cell viability was assessed by CCK-8 (Cell Counting Kit-8) assay after incubation with recombinant PK2 for 96h. The result was shown in Figure 2. It was obviously that PK2 significantly increased cell viability of HCT116 cells.
(A) HCT116 cells cultured in DMEM, stimulated with 100ng/mL PK2 for 96h;
(B) Unstimulated HCT116 cells cultured in DMEM for 96h.

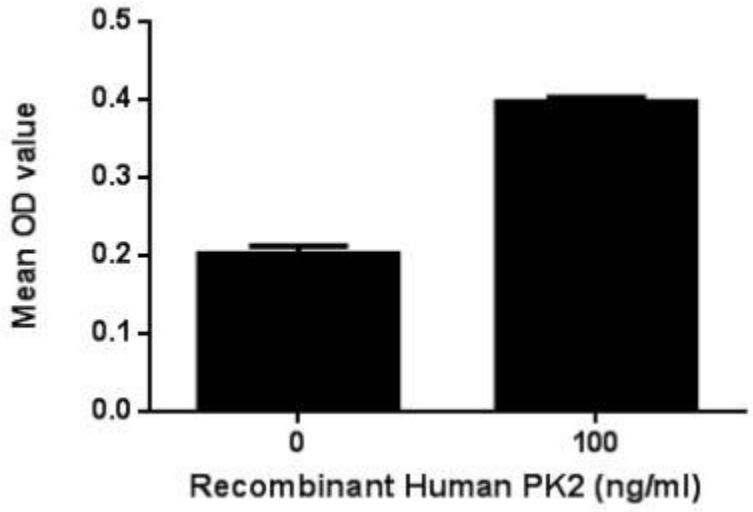

Figure. Cell proliferation of HCT116 cells after stimulated with PK2.

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

Figure. SDS-PAGE

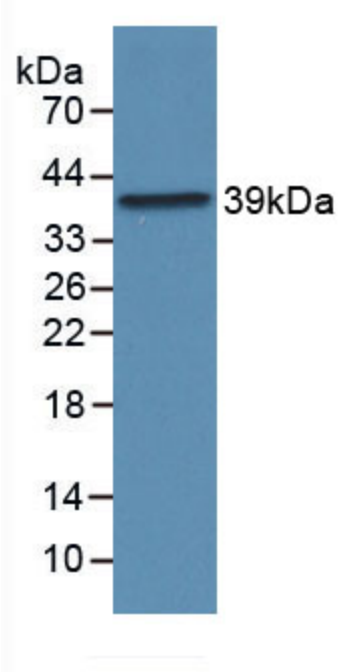

Figure. Western Blot

[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.