

# Active Regenerating Islet Derived Protein 3 Beta (REG3b) Instruction Manual

## SBPK383Mu01

**Mus musculus (Mouse)**

**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%

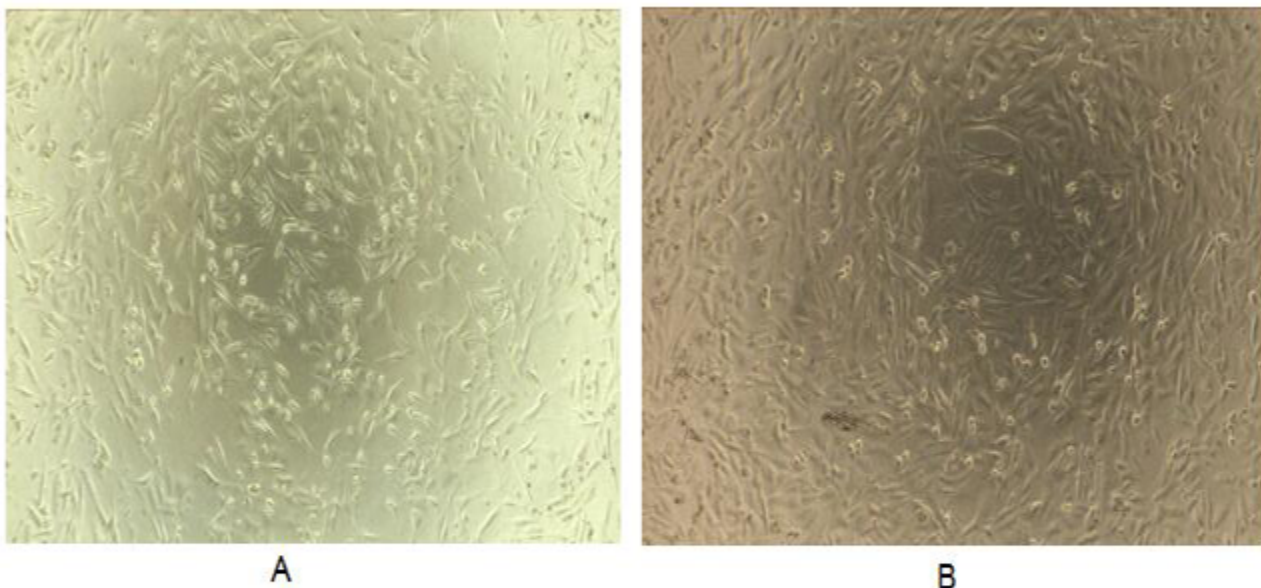
**Isoelectric Point**

7.8

**Applications**

Cell culture; Activity Assays.

### ACTIVITY TEST



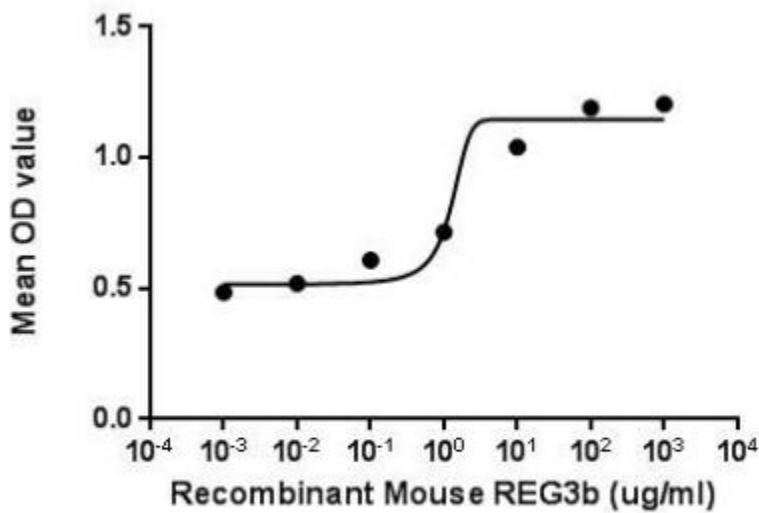
**Figure 1. Cell proliferation of SK-N-SH cells after stimulated with REG3b.**

**(A) Unstimulated SK-N-SH cells cultured in serum-free DMEM for 72h.**

**(B) SK-N-SH cells cultured in DMEM, stimulated with 10ng/mL REG3b 72h;**

Regenerating Islet Derived Protein 3 Beta (REG3b) also known as PAP-I and HIP is bactericidal C-type lectin which acts against several intestinal Gram-positive bacteria and

Gram-negative bacteria. The Reg family proteins have been implicated in a range of physiological processes including acting as acute phase reactants, lectins, survival/growth factors for insulin-producing pancreatic beta-cells, neural cells, and epithelial cells of the digestive system. To test the effect of REG3b on cell proliferation of SK-N-SH, SK-N-SH cells were seeded into triplicate wells of 96-well plates at a density of 5,000 cells/well and allowed to attach overnight, then the medium was replaced with serum-free standard DMEM prior to the addition of various concentrations of REG3b. After incubated for 72h, cells were observed by inverted microscope and cell proliferation 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 at 37 $^{\circ}$ C .Cell proliferation of SK-N-SH cells after incubation with REG3b for 72h observed by inverted microscope was shown in Figure 1.



**Figure 2. The dose-effect curve of REG3b on SK-N-SH cell.**

The dose-effect curve of REG3b was shown in Figure 2. It was obvious that REG3b significantly promoted cell proliferation of SK-N-SH cells. The ED50 for this effect is typically 3.685-84.37ng/mL.

## USAGE

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

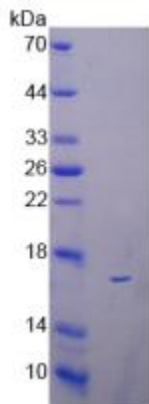
## STORAGE

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

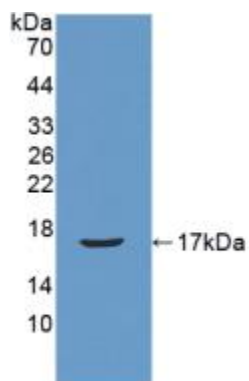


Figure. Western Blot; Sample: Recombinant REG3b, Mouse.

### **[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.