# **Active Myostatin (MSTN) Instruction Manual**

# SBPB256Hu61

## Homo sapiens (Human)

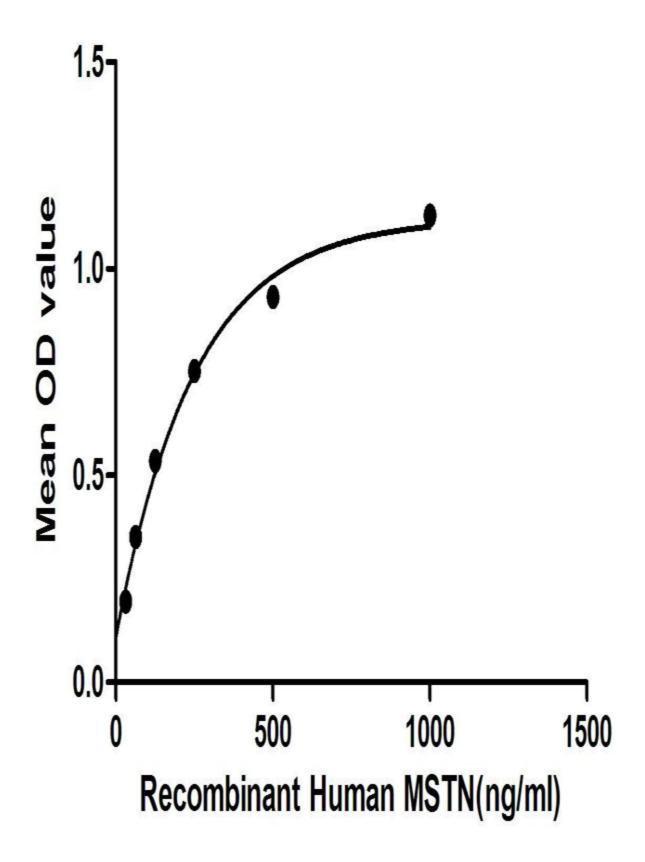
**Buffer Formulation** 20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.

**Traits** Freeze-dried powder

Purity > 95% Isoelectric Point 6.4

**Applications** Cell culture; Activity Assays.

**ACTIVITY TEST** 



Myostatin (MSTN) also known as growth differentiation factor 8 (GDF-8) is a member of the TGF beta protein family. Myostatin is a secreted growth differentiation factor that produced and released by myocytes. This protein negatively regulates skeletal muscle cell proliferation and differentiation. Besides, Bone Morphogenetic Protein 1 (BMP1) has been identified as an interactor of MSTN, thus a binding ELISA assay was conducted to detect the interaction of recombinant human MSTN and recombinant human BMP1. Briefly, MSTN were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100uL were then transferred to BMP1-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-MSTN 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 MSTN and BMP1 was shown in Figure 1, and this effect was in a dose dependent manner. Figure. The binding activity of MSTN with BMP1.

#### **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

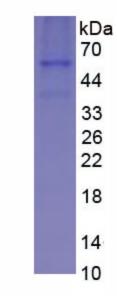


Figure. SDS-PAGE

## [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.