

# Active Mdm2 p53 Binding Protein Homolog (MDM2) Instruction Manual

**SBPG176Hu01**

**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%

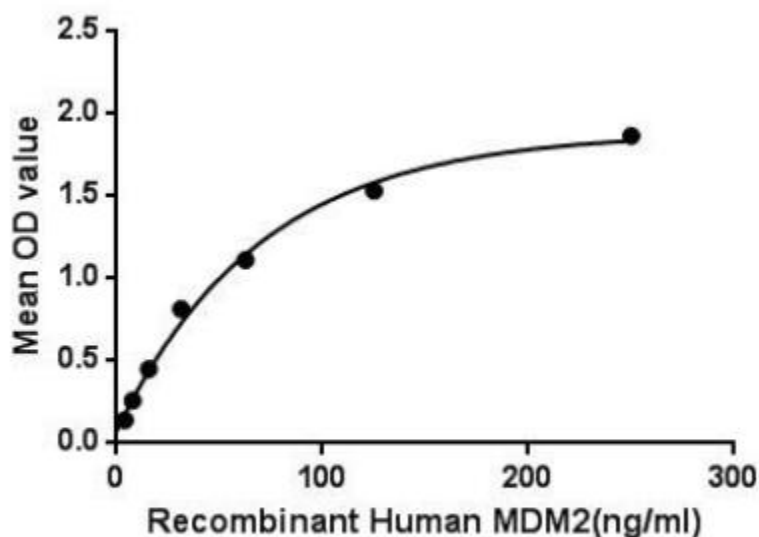
**Isoelectric Point**

4.3

**Applications**

Cell culture; Activity Assays.

**ACTIVITY TEST**



**Figure 1. The binding activity of MDM2 with S100.**

Mouse double minute 2 homolog (MDM2) also known as E3 ubiquitin-protein ligase Mdm2 is a cellular oncoprotein that recognizes the N-terminal trans-activation domain (TAD) of the p53 tumor suppressor and as an inhibitor of p53 transcriptional activation. The human homologue of this protein is sometimes called Hdm2. The p53 tumor suppressor is the key target of MDM2. It has been identified as a p53 interacting protein that represses p53 transcriptional activity and also acts as an E3 ubiquitin ligase, targeting

both itself and p53 for degradation by the proteasome. MDM2 is capable of auto-polyubiquitination, and in complex with p300, a cooperating E3 ubiquitin ligase, is capable of polyubiquitinating p53. Besides, S100 Calcium Binding Protein (S100) has been identified as an interactor of MDM2, thus a binding ELISA assay was conducted to detect the interaction of recombinant human MDM2 and recombinant human S100. Briefly, MDM2 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100uL were then transferred to S100-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-MDM2 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 of MDM2 and S100 was shown in Figure 1, and this effect was in a dose dependent manner.

## **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**

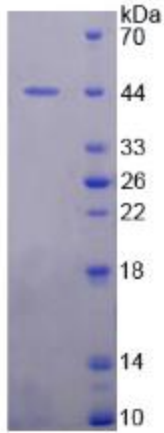


Figure. SDS-PAGE

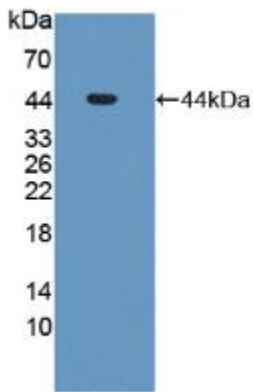


Figure. Western Blot; Sample: Recombinant MDM2, Human.

**[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.