Active Mdm2 p53 Binding Protein Homolog (MDM2)

Catalog No.: TP10239 50μg

Sequence Information

Species: Human **Gene ID:**4193

Swiss Prot:Q00987 **Synonyms:**HDMX; hdm2; Mouse Double Minute 2,Human Homolog Of p53-Binding Protein; Oncoprotein Mdm2

Residues: Met1-Pro218

MCNTNMSVPTDGAVTTSQIPASEQETLDYWKCTSCNEMNPPLPSHCNRCWALRE
NWLPEDKGKDKGEISEKAKLENSTQAEEGFDVPDCKKTIVNDSRESCVEENDDK
ITQASQSQESEDYSQPSTSSSIIYSSQEDVKEFEREETQDKEESVESSLPLNAI
EPCVICQGRPKNGCIVHGKTGHLMACFTCAKKLKKRNKPCPVCRQPIQMIVLTY
FP

Product Information

Source: Prokaryotic expression.

Host: *E. coli*

Tags:N-terminal His Tag

Subcellular Location: Cytoplasm.

Purity: >97%

Traits: Freeze-dried powder

Buffer formulation:PBS, pH7.4, containing 0.1% SKL, 5% Trehalose.

Original Concentration: 350μg/mL

Applications: Positive Control; Immunogen; SDS-PAGE; WB.

(May be suitable for use in other assays to be determined by the end user.)

Predicted isoelectric point: 4.6

Predicted Molecular Mass: 28.2kDa

Accurate Molecular Mass: 44kDa as determined by SDS-PAGE reducing conditions.

[USAGE]

Reconstitute in ddH_2O to a concentration of 0.1-0.5 mg/mL. Do not vortex.

[STORAGE AND STABILITY]

Storage: Avoid repeated freeze/thaw cycles.

Store at 2-8°C for one month.

Aliquot and store at -80°C for 12 months.

Stability Test: 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.

[ACTIVITY]

Mouse double minute 2 homolog (MDM2) also known as E3 ubiquitin-proteinligase. 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 sometimescalled Hdm2. The p53 tumor suppressor is the key target of MDM2. It hasbeenidentified as a p53 interacting protein that represses p53 transcriptional activityand also acts as an E3 ubiquitin ligase, targeting both itself andp53fordegradation by the proteasome. MDM2 is capable of auto-polyubiquitination, andin complex with p300, a cooperating E3 ubiquitin ligase, is capableof
polyubiquitinating p53. Besides, S100 Calcium Binding Protein (S100) hasbeenidentified as an interactor of MDM2, thus a binding ELISA assay was conductedto detect the interaction of recombinant human MDM2 and recombinant human
S100. Briefly, MDM2 were diluted serially in PBS, with 0.01%BSA(pH7.4). Duplicate samples of 100 ul were then transferred to S100-coated microtiterwells and incubated for 2h at 37℃. Wells were washed with PBST and incubatedfor 1h with anti-MDM2 pAb, then aspirated and washed 3 times. After incubationwith HRP labelled secondary antibody, wells were aspirated and washed3times. With the addition of substrate solution , wells were incubated 15-25 minutesat
37℃. Finally, add 50 μL stop solution to the wells and read at 450nmimmediately. The binding activity of recombinant human MDM2 and recombinant
human S100 was shown in Figure 1, the EC50 is 0.037 ug/ml.

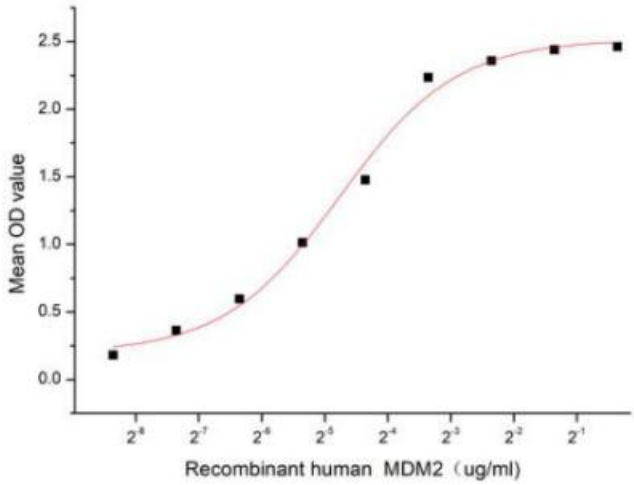

Figure 1. The binding activity of recombinant human MDM2 and recombinant human S100

[IDENTIFICATION]

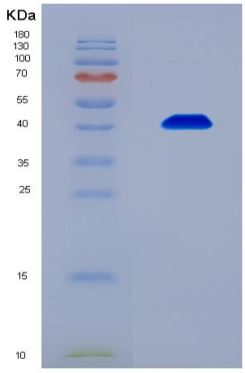

Figure 2. SDS-PAGE

[IMPORTANT NOTE]

The kit is designed for in vitro and research use only, we will not be responsible for any issue if the kit was used in clinical diagnostic or any other procedures.