

MDM2 (phospho Ser166) Polyclonal Antibody

Catalog No: YP0883

Reactivity: Human; Mouse; Monkey

Applications: WB;IHC;IF;ELISA

Target: MDM2

Fields: >>Endocrine resistance;>>Platinum drug resistance;>>FoxO signaling

pathway;>>Cell cycle;>>p53 signaling pathway;>>Ubiquitin mediated proteolysis;>>Endocytosis;>>PI3K-Akt signaling pathway;>>Cellular

senescence;>>C-type lectin receptor signaling pathway;>>Thyroid hormone signaling pathway;>>Shigellosis;>>Human cytomegalovirus infection;>>Human

papillomavirus infection;>>Epstein-Barr virus infection;>>Pathways in

cancer;>>Transcriptional misregulation in cancer;>>Viral carcinogenesis;>>Proteoglycans in cancer;>>MicroRNAs in

cancer;>>Glioma;>>Prostate cancer;>>Melanoma;>>Bladder cancer;>>Chronic

myeloid leukemia

Gene Name: MDM2

Protein Name: E3 ubiquitin-protein ligase Mdm2

Q00987

Human Gene Id: 4193

Human Swiss Prot

No:

Mouse Gene Id: 17246

Mouse Swiss Prot

No:

P23804

Immunogen: The antiserum was produced against synthesized peptide derived from human

MDM2 around the phosphorylation site of Ser166. AA range:132-181

Specificity: Phospho-MDM2 (S166) Polyclonal Antibody detects endogenous levels of

MDM2 protein only when phosphorylated at S166.

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

1/4



Source: Polyclonal, Rabbit, IgG

Dilution: WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:5000. Not

yet tested in other applications.

Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 90kD

Cell Pathway: Cell_Cycle_G1S;Cell_Cycle_G2M_DNA;p53;Ubiquitin mediated

proteolysis; Endocytosis; Pathways in cancer; Glioma; Prostate cancer; Melanoma; Bladder cancer; Chronic myeloid leukemia;

Background: This gene encodes a nuclear-localized E3 ubiquitin ligase. The encoded protein

can promote tumor formation by targeting tumor suppressor proteins, such as p53, for proteasomal degradation. This gene is itself transcriptionally-regulated by p53. Overexpression or amplification of this locus is detected in a variety of different cancers. There is a pseudogene for this gene on chromosome 2.

Alternative splicing results in a multitude of transcript variants, many of which may

be expressed only in tumor cells. [provided by RefSeg, Jun 2013],

Function: disease: Seems to be amplified in certain tumors (including soft tissue sarcomas,

osteosarcomas and gliomas). A higher frequency of splice variants lacking p53 binding domain sequences was found in late-stage and high-grade ovarian and

bladder carcinomas. Four of the splice variants show loss of p53

binding.,domain:Region I is sufficient for binding p53 and inhibiting its G1 arrest and apoptosis functions. It also binds p73 and E2F1. Region II contains most of a central acidic region required for interaction with ribosomal protein L5 and a putative C4-type zinc finger. The RING finger domain which coordinates two molecules of zinc interacts specifically with RNA whether or not zinc is present and mediates the heterooligomerization with MDM4. It is also essential for its

ubiquitin ligase E3 activity toward p53 and itself., function: Inhibits TP53/p53- and

TP73/p73-mediated cell cycle arrest

Subcellular Location:

Nucleus, nucleoplasm. Cytoplasm. Nucleus, nucleolus. Nucleus. Expressed predominantly in the nucleoplasm. Interaction with ARF(P14) results in the localization of both proteins to the nucleolus. The nucleolar localization signals in both ARF(P14) and MDM2 may be necessary to allow efficient nucleolar

localization of both proteins. Colocalizes with RASSF1 isoform A in the nucleus.

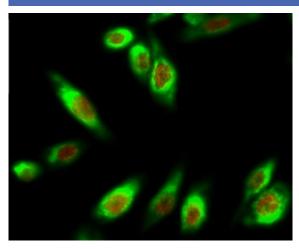
Expression : Ubiquitous. Isoform Mdm2-A, isoform Mdm2-B, isoform Mdm2-C, isoform

Mdm2-D, isoform Mdm2-E, isoform Mdm2-F and isoform Mdm2-G are observed

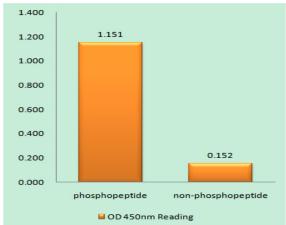


in a range of cancers but absent in normal tissues.

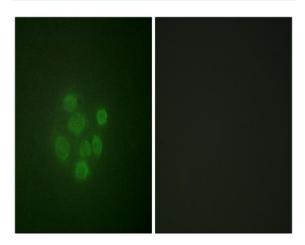
Products Images



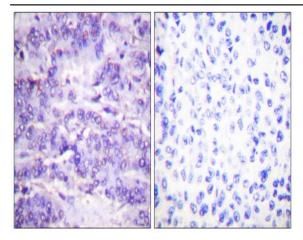
Immunofluorescence analysis of Hela cell. 1,MDM2 (phospho Ser166) Polyclonal Antibody(red) was diluted at 1:200(4° overnight). HAO1 Monoclonal Antibody(Mix)(green) was diluted at 1:200(4° overnight). 2, Goat Anti Rabbit Alexa Fluor 594 Catalog:RS3611 was diluted at 1:1000(room temperature, 50min). Goat Anti Mouse Alexa Fluor 488 Catalog:RS3208 was diluted at 1:1000(room temperature, 50min).



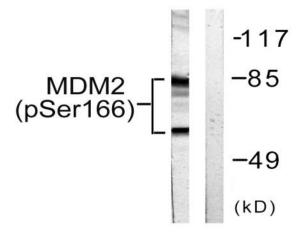
Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using MDM2 (Phospho-Ser166) Antibody



Immunofluorescence analysis of A549 cells, using MDM2 (Phospho-Ser166) Antibody. The picture on the right is blocked with the phospho peptide.



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using MDM2 (Phospho-Ser166) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from COS7 cells, using MDM2 (Phospho-Ser166) Antibody. The lane on the right is blocked with the phospho peptide.