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# Mouse Anti-MDM2 antibody

SLM-51662M

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|---|---|
| **Product Name** | MDM2 |
| **Chinese Name** | 双微体 2 癌基因单克隆抗体 |
| **Alias** | Double minute 2 protein; Hdm 2; HDM2; MDM 2; Mdm2 transformed 3T3 cell double minute 2 p53 binding protein (mouse) binding protein 104kDa; MDM2BP; Mouse Double Minute 2; MTBP; Murine Double Minute Chromosome 2; Oncoprotein Mdm2; p53 Binding Protein Mdm2; Ubiquitin protein ligase E3 Mdm2; MDM2_HUMAN; E3 ubiquitin-protein ligase Mdm2. |
| **Research Area** | Tumour Cell biology Apoptosis Cyclin transcriptional regulatory factor Epigenetics |
| **Immunogen Species** | Mouse |
| **Clonality** | Monoclonal |
| **Clone NO.** | G4W1 |
| **React Species** | Human, |
| **Applications** | WB=1:500-2000<br>not yet tested in other applications.<br>optimal dilutions/concentrations should be determined by the end user. |
| **Theoretical molecular weight** | 55kDa |
| **Cellular localization** | The nucleus cytoplasmic |
| **Form** | Liquid |
| **Concentration** | 1mg/ml |
| **immunogen** | Recombinant human MDM2 between 196-435 amino acids. |
| **Lsotype** | IgG1,k |
| **Purification** | affinity purified by Protein G |
| **Buffer Solution** | 1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol. |
| **Storage** | Shipped at 4℃. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. |
| **Attention** | This product as supplied is intended for research use only, not for use in |

human, therapeutic or diagnostic applications.

**PubMed**

PubMed

Inhibits TP53/p53- and TP73/p73-mediated cell cyclearrest and apoptosis by binding its transcriptional activation domain. Functions as a ubiquitin ligase E3, in the presence of E1 and E2, toward p53 and itself. Permits the nuclear export of p53 and targets it for proteasome-mediated proteolysis. Binds p53, p73, ARF(P14), ribosomal protein L5 and specifically to RNA. Can interact also with retinoblastoma protein(RB), E1A-associated protein EP300 and the E2F1 transcription factor. Forms a ternary complex with TP53/p53 and WWOX. Interacts with CDKN2AIP, MTBP, TRBG1 and USP7. Isoform Mdm2-F does not interact with TP53/p53. Interacts with PYHIN1. Interacts with, and ubiquitinates HIV-1 Tat. Belongs to the MDM2/MDM4 family.

**Product Detail**

**Function:**
E3 ubiquitin-protein ligase that mediates ubiquitination of p53/TP53, leading to its degradation by the proteasome. Inhibits p53/TP53- and p73/TP73-mediated cell cycle arrest and apoptosis by binding its transcriptional activation domain. Also acts as an ubiquitin ligase E3 toward itself and ARRB1. Permits the nuclear export of p53/TP53. Promotes proteasome-dependent ubiquitin-independent degradation of retinoblastoma RB1 protein. Inhibits DAXX-mediated apoptosis by inducing its ubiquitination and degradation. Component of the TRIM28/KAP1-MDM2-p53/TP53 complex involved in stabilizing p53/TP53. Also component of the TRIM28/KAP1-ERBB4-MDM2 complex which links growth factor and DNA damage response pathways.

**Subcellular Location:**
Nucleus, nucleoplasm. Cytoplasm. Nucleus, nucleolus. 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.

**Tissue Specificity:**
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.

**Post-translational modifications:**
Phosphorylated in response to ionizing radiation in an ATM-dependent manner.
Auto-ubiquitinated; which leads to proteasomal degradation. Deubiquitinated

by USP2 leads to its accumulation and increases deubiquitinilation and degradation of p53/TP53. Deubiquitinated by USP7; leading to stabilize it.

**DISEASE:**
Note=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.

**Similarity:**
Belongs to the MDM2/MDM4 family.
Contains 1 RanBP2-type zinc finger.
Contains 1 RING-type zinc finger.
Contains 1 SWIB domain.

**SWISS:**
Q00987

**Gene ID:**
4193

**Database links:**

Entrez Gene: 4193 Human

SwissProt: Q00987 Human

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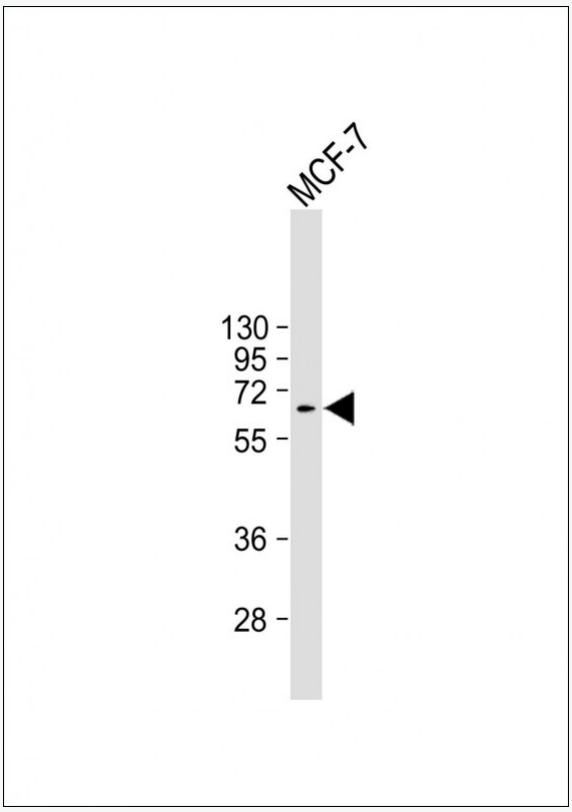
**Product Picture**




Sample:

Lane 1: MCF-7 cell lysates

Primary: Anti-MDM2 (SLM-51662M) at 1/4000 dilution

Secondary: IRDye800CW Goat Anti-Mouse IgG at 1/20000 dilution

Predicted band size: 55 kD

Observed band size: 62 kD