

**MDM2 Antibody**  
**Purified Mouse Monoclonal Antibody (Mab)**  
**Catalog # AM8613b****Specification**

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**MDM2 Antibody - Product Information**

Application	WB,E
Primary Accession	<a href="#">Q00987</a>
Reactivity	Human
Host	Mouse
Clonality	monoclonal
Isotype	IgG1,k
Calculated MW	55233

**MDM2 Antibody - Additional Information****Gene ID** 4193**Other Names**

E3 ubiquitin-protein ligase Mdm2, 6.3.2.-, Double minute 2 protein, Hdm2, Oncoprotein Mdm2, p53-binding protein Mdm2, MDM2

**Target/Specificity**

This MDM2 antibody is generated from a mouse immunized with a recombinant protein between 196-435 amino acids from the human MDM2.

**Dilution**

WB~~1:4000

E~~Use at an assay dependent concentration.

**Format**

Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

MDM2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**MDM2 Antibody - Protein Information****Name** MDM2

**Function** E3 ubiquitin-protein ligase that mediates ubiquitination of p53/TP53, leading to its degradation by the proteasome (PubMed:[29681526](#)). Inhibits p53/TP53- and p73/TP73-mediated cell cycle arrest and apoptosis by binding its transcriptional activation domain. Also acts as a

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 a component of the TRIM28/KAP1-ERBB4-MDM2 complex which links growth factor and DNA damage response pathways. Mediates ubiquitination and subsequent proteasome degradation of DYRK2 in nucleus. Ubiquitinates IGF1R and SNAI1 and promotes them to proteasomal degradation (PubMed:[12821780](#), PubMed:[15053880](#), PubMed:[15195100](#), PubMed:[15632057](#), PubMed:[16337594](#), PubMed:[17290220](#), PubMed:[19098711](#), PubMed:[19219073](#), PubMed:[19837670](#), PubMed:[19965871](#), PubMed:[20173098](#), PubMed:[20385133](#), PubMed:[20858735](#), PubMed:[22128911](#)). Ubiquitinates DCX, leading to DCX degradation and reduction of the dendritic spine density of olfactory bulb granule cells (By similarity). Ubiquitinates DLG4, leading to proteasomal degradation of DLG4 which is required for AMPA receptor endocytosis (By similarity). Negatively regulates NDUFS1, leading to decreased mitochondrial respiration, marked oxidative stress, and commitment to the mitochondrial pathway of apoptosis (PubMed:[30879903](#)). Binds NDUFS1 leading to its cytosolic retention rather than mitochondrial localization resulting in decreased supercomplex assembly (interactions between complex I and complex III), decreased complex I activity, ROS production, and apoptosis (PubMed:[30879903](#)).

#### **Cellular Location**

Nucleus, nucleoplasm. Cytoplasm. Nucleus, nucleolus. Nucleus. Note=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 Location**

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

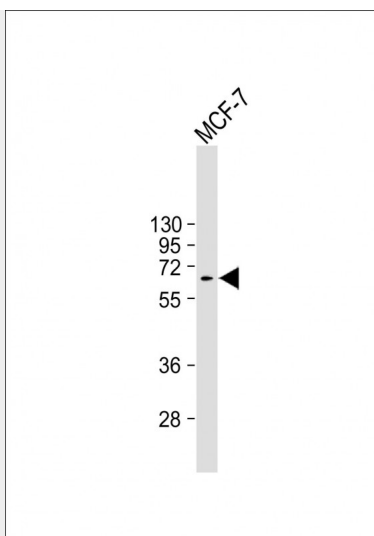
### **MDM2 Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### **MDM2 Antibody - Images**





Anti-MDM2 Antibody at 1:4000 dilution + MCF-7 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 55 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

### **MDM2 Antibody - Background**

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 a 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. Mediates ubiquitination and subsequent proteasome degradation of DYRK2 in nucleus. Ubiquitinates IGF1R and SNAI1 and promotes them to proteasomal degradation.

### **MDM2 Antibody - References**

Oliner J.D.,et al.Nature 358:80-83(1992).  
Sigalas I.,et al.Nat. Med. 2:912-917(1996).  
Veldhoen N.,et al.Oncogene 18:7026-7033(1999).  
Tamborini E.,et al.Int. J. Cancer 92:790-796(2001).  
Ota T.,et al.Nat. Genet. 36:40-45(2004).