

# Anti-Phospho-MDM2-Ser166 antibody (110-190)

Cat # NB-22-1043-50 size: 50µg

Cat # NB-22-1043- 200ul size: 200µg



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



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



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 (PhosphoSer166) Antibody. The picture on the right is blocked with the phospho peptide.

### Description

Rabbit polyclonal antibody anti-Phospho-E3 Ubiquitin-Protein Ligase Mdm2-Ser166 (110-190) is suitable for use in Western Blot, Immunohistochemistry, Immunofluorescence, Immunocytochemistry and ELISA research applications.

#### **Product Information**

Host:	Rabbit
Applications:	WB, IHC-P, IF, ICC, ELISA
Reactivity:	Human, Mouse, Monkey
Clonality:	Polyclonal
Conjugation:	Unconjugated
Isotype:	lgG
Formulation:	PBS, 50% Glycerol, 0.5% BSA and 0.02% Sodium Azide.
Purification:	affinity-purified from rabbit anti-serum by affinity-chromatography



Concentration:	1.0 mg/mL
Dilution Range:	WB 1:500-1:2000
	IHC 1:100-1:300
	IF 1:200-1:1000
	ELISA 1:5000
Storage Instruction:	Store at-20°C for up to 1 year from the date of receipt, and avoid
	repeat freeze-thaw cycles.

#### Target

Gene Symbol:	MDM2
Gene ID:	4193
Uniprot ID:	MDM2_HUMAN
Immunogen Region:	110-190
Immunogen:	The antiserum was produced against synthesized peptide derived from
	human MDM2 around the phosphorylation site of Ser166 at amino
	acid range 132-181.
Specificity:	Phospho-MDM2-Ser166 polyclonal antibody (E3 Ubiquitin-Protein
	Ligase Mdm2) binds to endogenous E3 Ubiquitin-Protein Ligase Mdm2 at the amino acid region 110-190 only when phosphorylated at Ser166.

## **Additional information**

Post Translational Modifications	Phosphorylation on Ser-166 by SGK1 activates ubiquitination of p53/TP53. Phosphorylated at multiple sites near the RING domain by ATM upon DNA damage.this prevents oligomerization and E3 ligase processivity and impedes constitutive p53/TP53 degradation. Autoubiquitination leads to proteasomal degradation.resulting in p53/TP53 activation it may be regulated by SFN. Also ubiquitinated by TRIM13. Deubiquitinated by USP2 leads to its accumulation and increases deubiquitination and degradation of p53/TP53. Deubiquitinated by USP7 leading to its stabilization.	
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 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. Ubiquitinates DCX, leading to DCX degradation and reduction of the dendritic spine density of olfactory bulb granule cells. Ubiquitinates DLG4, leading to proteasomal degradation of DLG4 which is required for AMPA receptor endocytosis. Negatively regulates NDUFS1, leading to decreased mitochondrial respiration, marked oxidative stress, and commitment to the mitochondrial pathway of apoptosis. Binds NDUFS1 leading to its cytosolic retention rather than mitochondrial localization resulting in decreased supercomplex assembly (interactions between complex Land complex III) decreased complex Lactivity. BOS production, and apontosis	
Protein Name	E3 Ubiquitin-Protein Ligase Mdm2, Double Minute 2 Protein, Hdm2, Oncoprotein Mdm2, Ring- Type E3 Ubiquitin Transferase Mdm2, P53-Binding Protein Mdm2	
Cellular Localisation	Nucleus, Nucleoplasm, Cytoplasm, 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	
For reference only		

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