Rabbit MDM2 Polyclonal Antibody | anti-MDM2 antibody

MDM2 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA325889	**Rabbit**	**Human, Mouse, Rat, Monkey**	**ELISA, Immunocytochemistry, Immunofluorescence, Western Blot**

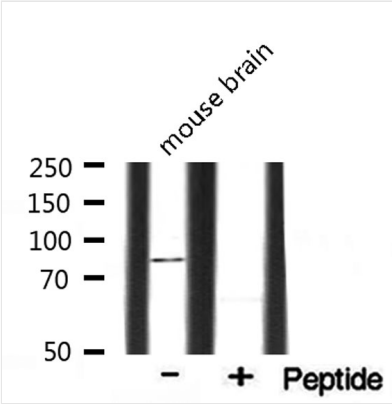
PRODUCT SYNONYMS

MDM2; Polyclonal Antibody; MDM2 Antibody; ACTFS; Double minute 2 protein; E3 ubiquitin-protein ligase Mdm2; Hdm 2; Hdm2; HDMX; MDM 2; MDM2 oncogene E3 ubiquitin protein ligase; Mdm2 p53 E3 ubiquitin protein ligase homolog; Mdm2 transformed 3T3 cell double minute 2 p53 binding protein (mouse) binding protein 104kDa; MDM2_HUMAN; MDM2BP; Mouse Double Minute 2; MTBP; Murine Double Minute Chromosome 2; Oncoprotein Mdm2; p53 Binding Protein Mdm2; p53-binding protein Mdm2; Ubiquitin protein ligase E3 Mdm2; anti-MDM2 antibody

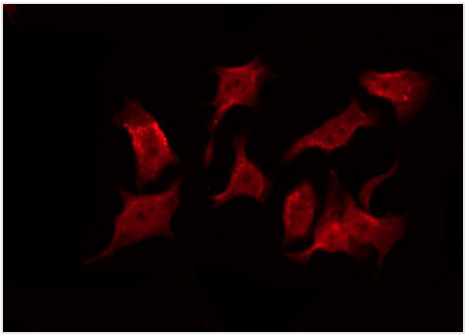
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat, Monkey
Clonality	Polyclonal
Isotype	IgG
Specificity	MDM2 antibody detects endogenous levels of total MDM2
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	442
Applicable Applications for anti-MDM2 antibody	ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), WB (Western Blot)
Immunogen	A synthesized peptide derived from human MDM2
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.
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



WB (Western Blot)
Western blot analysis of extracts of mouse brain, using MDM2 antibody.



IF (Immunofluorescence)
AAA325889 staining COS7 by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) Ab, diluted at 1/600, was used as the secondary antibody.

ADDITIONAL INFORMATION

Related Product Information for anti-MDM2 antibody	Description: MDM2, a ubiquitin ligase for p53, plays a central role in regulation of the stability of p53 (1). Akt-mediated phosphorylation of MDM2 at Ser166 and Ser186 increases its interaction with p300, allowing MDM2-mediated ubiquitination and degradation of p53 (2-4). Phosphorylation of MDM2 also blocks its binding to p19ARF, increasing the degradation of p53 (3). 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 (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). Subunit Structure: Interacts with p53/TP53, TP73/p73, RBL5 and RP11. Binds specifically to RNA. Can interact with RB1, E1A-associated protein EP300 and the E2F1 transcription factor. Forms a ternary complex with p53/TP53 and WWOX. Interacts with CDKN2AIP, RFWD3, USP7, PYHIN1, and RBBP6. Interacts with ARRB1 and ARRB2. Interacts with PSMA3. Found in a trimeric complex with MDM2, MDM4 and USP2. Interacts with USP2 (via N-terminus and C-terminus). Interacts with MDM4. Part of a complex with MDM2, DAXX, RASSF1 and USP7. Part of a complex with DAXX, MDM2 and USP7. Interacts directly with DAXX and USP7. Interacts (via C-terminus) with RASSF1 isoform A (via N-terminus); the interaction is independent of TP53. Interacts with APEX1; leading to its ubiquitination and degradation. Interacts with RYBP; this inhibits ubiquitination of TP53. Identified in a complex with RYBP and p53/TP53. Also component of the TRIM28/KAP1-MDM2-p53/TP53 complex involved in regulating p53/TP53 stabilization and activity. Binds directly both p53/TP53 and TRIM28. Component of the TRIM28/KAP1-ERBB4-MDM2 complex involved in connecting growth factor responses with DNA damage. Interacts directly with both TRIM28 and ERBB4 in the complex. Interacts with DYRK2. Interacts with IGF1R. Interacts with TRIM13; the interaction ubiquitinates MDM2 leading to its proteasomal degradation. Interacts with SNAI1; this interaction promotes SNAI1 ubiquitination. Interacts with NOTCH1 (via intracellular domain). Interacts with FHIT. Interacts with RFFL and RNF34; the interaction stabilizes MDM2. Interacts with CDK5RAP3 and CDKN2A/ARF; form a ternary complex involved in regulation of p53/TP53 (PubMed:16173922). Interacts with MTA1. Interacts with AARB2. Interacts with MTBP. Interacts with PML. Interacts with TBRG1. Interacts with the 5S RNP which is composed of the 5S RNA, RPL5 and RPL11; the interaction is direct, occurs in the nucleoplasm and negatively regulates MDM2-mediated TP53 ubiquitination and degradation (PubMed:15195100, PubMed:24120868). Interacts with ADGRB1; the interaction results in inhibition of MDM2-mediated ubiquitination and degradation of DLG4/PSD95, promoting DLG4 stability and regulating synaptic plasticity (By similarity). Interacts with RPL23A; this interaction may promote p53/TP53 polyubiquitination (PubMed:26203195). 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. Similarity: 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. Belongs to the MDM2/MDM4 family.

NCBI AND UNIPROT INFORMATION

NCBI GI #	223890205
NCBI GeneID	4193
NCBI Accession #	NP_001138811.1
NCBI GenBank Nucleotide #	NM_001145339.2

UniProt Accession #	Q00987; Q13226; Q13297; Q13298; Q13299; Q13300; Q13301; Q53XW0; Q71TW9; Q8WYJ1; A6NL51; A8K2S6
Molecular Weight	Observed: 55 kDa Predicted: 56 kDa
NCBI Official Full Name	E3 ubiquitin-protein ligase Mdm2 isoform h
NCBI Official Synonym Full Names	MDM2 proto-oncogene
NCBI Official Symbol	MDM2
NCBI Official Synonym Symbols	HDMX; hdm2; ACTFS
NCBI Protein Information	E3 ubiquitin-protein ligase Mdm2
UniProt Protein Name	E3 ubiquitin-protein ligase Mdm2
UniProt Gene Name	**MDM2**
UniProt Synonym Gene Names	Hdm2

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: https://stage.aaabiotech.com/polyclonal/mdm2-antibody-immunocytochemistry-immunofluorescence-western-blot-elisa/325889