

Rabbit anti-Human Phospho-MDM2 (S395) Polyclonal Antibody | anti-MDM2 antibody

Phospho-MDM2 (S395) Antibody

CATALOG # AAA288366	HOST Rabbit	REACTIVITY Human	APPLICATIONS ELISA, Dot Blot
-------------------------------	-----------------------	----------------------------	--

PRODUCT SYNONYMS

Phospho-MDM2 (S395); Polyclonal Antibody; Phospho-MDM2 (S395) Antibody; E3 ubiquitin-protein ligase Mdm2; 632-; Double minute 2 protein; Hdm2; Oncoprotein Mdm2; p53-binding protein Mdm2; MDM2; anti-MDM2 antibody

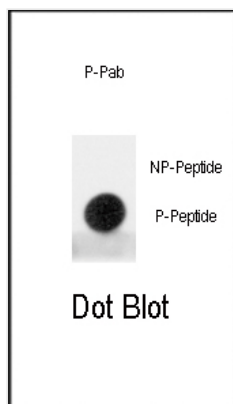
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	This MDM2 Antibody is generated from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding S395 of human MDM2.
Purity/Purification	This antibody is purified through a protein A column, followed by peptide affinity purification.
Form/Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.
Sequence Length	442
Applicable Applications for anti-MDM2 antibody	ELISA, DB (Dot Blot)
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

Preparation and 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.

IMAGES



DB (Dot Blot)

Dot blot analysis of anti-Phospho-MDM2-pS395 Antibody on nitrocellulose membrane. 50ng of Phospho-peptide or Non Phospho-peptide per dot were adsorbed. Antibody working concentrations are 0.5ug per ml.

ADDITIONAL INFORMATION

Related Product Information for anti-MDM2 antibody	MDM2 is a target of the transcription factor tumor protein p53. This protein is a nuclear phosphoprotein that binds and inhibits transactivation by tumor protein p53, as part of an autoregulatory negative feedback loop. Overexpression of MDM2 can result in excessive inactivation of tumor protein p53, diminishing its tumor suppressor function. This protein has E3 ubiquitin ligase activity, which targets tumor protein p53 for proteasomal degradation. MDM2 also affects the cell cycle, apoptosis, and tumorigenesis through interactions with other proteins, including retinoblastoma 1 and ribosomal protein L5.
Product Categories/Family for anti-MDM2 antibody	Cancer ; Cell Biology ; Phospho Antibodies
References	Lu X, et al. (2007) The Wip1 Phosphatase acts as a gatekeeper in the p53-Mdm2 autoregulatory loop. Cancer Cell 12, 342-54 Balass M, et al. (2002) Characterization of two peptide epitopes on Mdm2 oncoprotein that affect p53 degradation. Peptides 23, 1719-25 Maya R, et al. (2001) ATM-dependent phosphorylation of Mdm2 on serine 395: role in p53 activation by DNA damage. Genes Dev 15, 1067-77

NCBI AND UNIPROT INFORMATION

NCBI GI #	223890205
NCBI GeneID	4193
NCBI Accession #	NP_001138811.1 ; NP_001265391.1 ; NP_002383.2
NCBI GenBank Nucleotide #	NM_001145339.2
UniProt Accession #	Q00987 ; Q13226 ; Q13297 ; Q13298 ; Q13299 ; Q13300 ; Q13301 ; Q53XW0 ; Q71TW9 ; Q8WYJ1 ; A6NL51 ; A8K2S6
NCBI Official Full Name	E3 ubiquitin-protein ligase Mdm2 isoform h
NCBI Official Synonym Full Names	MDM2 proto-oncogene, E3 ubiquitin protein ligase
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
UniProt Entry Name	MDM2_HUMAN

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/phospho-mdm2-s395-antibody-dot-blot-elisa/288366>