

# Phospho-MDM2 (S166) Antibody

Rabbit mAb

Catalog # AP92939

## Product Information

|                          |  |
|--------------------------|--|
| <b>Application</b>       | WB, IHC                                |
| <b>Primary Accession</b> | <a href="#">Q00987</a>                 |
| <b>Reactivity</b>        | Human                                  |
| <b>Clonality</b>         | Monoclonal                             |
| <b>Other Names</b>       | ACTFS; Hdm2; HDMX; MDM2; MDM2BP; MTBP; |
| <b>Isotype</b>           | Rabbit IgG                             |
| <b>Host</b>              | Rabbit                                 |
| <b>Calculated MW</b>     | 55233                                  |

## Additional Information

|                                     |  |
|-------------------------------------|--|
| <b>Dilution</b>                     | WB 1:500~1:2000 IHC 1:50~1:200   |
| <b>Purification</b>                 | Affinity-chromatography  |
| <b>Immunogen</b>                    | A synthesized peptide derived from human Phospho-MDM2 (S166)   |
| <b>Description</b>                  | 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. |
| <b>Storage Condition and Buffer</b> | Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.  |

## Protein Information

|                 |   |
|-----------------|---|
| <b>Name</b>     | MDM2  |
| <b>Function</b> | E3 ubiquitin-protein ligase that mediates ubiquitination of p53/TP53, leading to its degradation by the proteasome (PubMed: <a href="#">29681526</a> ). 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: <a href="#">12821780</a> , PubMed: <a href="#">15053880</a> , PubMed: <a href="#">15195100</a> , PubMed: <a href="#">15632057</a> , PubMed: <a href="#">16337594</a> , PubMed: <a href="#">17290220</a> , |

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](#)).

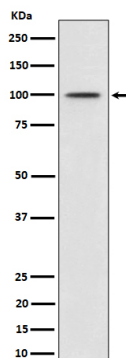
#### Cellular Location

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

## Images



Western blot analysis of Phospho-MDM2 (S166) expression in MCF7 cell treated with IGF-1 lysate.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.