

Product datasheet for **AP09495PU-S**

MDM2 pSer166 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IF, IHC, WB
Recommended Dilution:	Western Blot: 1/500 - 1/1000. Immunohistochemistry: 1/50 - 1/100. Immunofluorescence: 1/100 - 1/200.
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Synthesized phosphopeptide derived from human MDM2 around the phosphorylation site of Serine 166 (A-I-SP-E-T)
Specificity:	MDM2 (phospho-Ser166) Antibody detects endogenous levels of MDM2 only when phosphorylated at Serine 166.
Formulation:	Phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol State: Aff - Purified State: Liquid purified Ig
Concentration:	lot specific
Purification:	Affinity chromatography
Conjugation:	Unconjugated
Storage:	Store the antibody at -20°C. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	MDM2 proto-oncogene
Database Link:	Entrez Gene 4193 Human Q00987



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Background:

MDM2 is a nuclear phosphoprotein with an apparent molecular mass of 90 kD that forms a complex with the p53 tumor suppressor protein. Human MDM2 was identified as a homologous product of the 'murine double minute 2' gene (*mdm2*). The MDM2 gene enhances the tumorigenic potential of cells when it is overexpressed and encodes a putative transcription factor. Forming a tight complex with the p53 gene, the MDM2 oncogene can inhibit p53 mediated transactivation, MDM2 also binds to p53 protein. Inactivation of tumor suppressor genes leads to deregulated cell proliferation and is a key factor in human tumorigenesis. p53 can be subjected to negative regulation by the product of a single cellular protooncogene. The interference of binding to p53 prevents the interaction of MDM2 and its regulation of the transcriptional activity of p53 in vivo. Direct association of p53 with the cellular protein MDM2 results in ubiquitination and subsequent degradation of p53. MDM2 p53 complexes were preferentially found in S/G2M phases of the cell cycle. The MDM2 gene is alternatively spliced, producing 5 additional splice variant transcripts from the full length MDM2 gene. The alternatively spliced transcripts tend to be expressed in tumorigenic tissue, whereas the full length MDM2 transcript is expressed in normal tissue.

Synonyms:

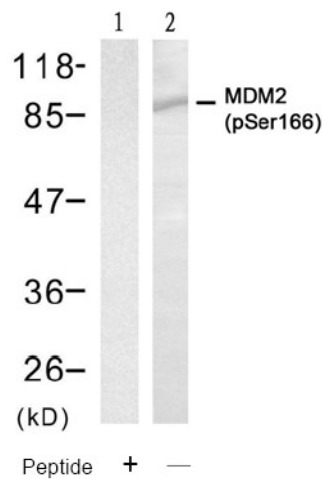
p53-binding protein Mdm2, Oncoprotein Mdm2, Double minute 2 protein, Hdm2

Protein Families:

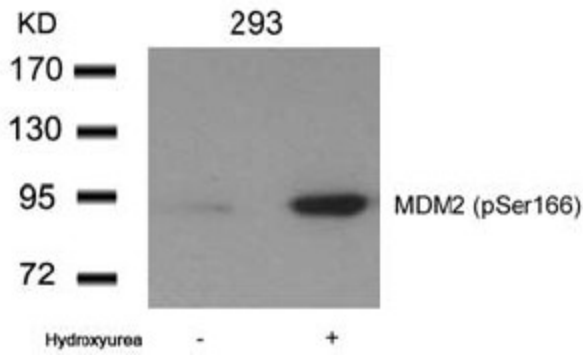
Druggable Genome, Transcription Factors

Protein Pathways:

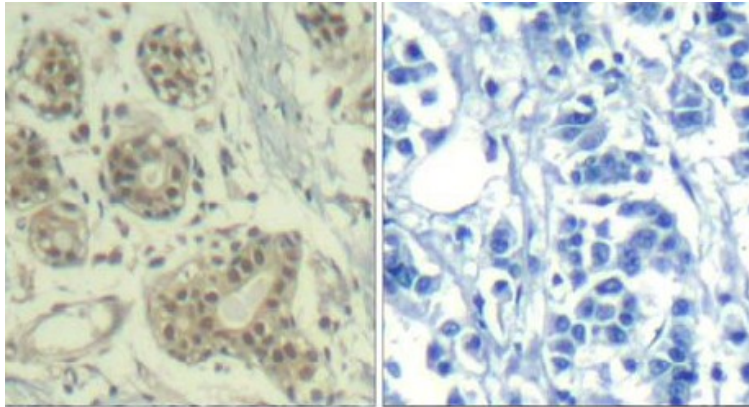
Bladder cancer, Cell cycle, Chronic myeloid leukemia, Endocytosis, Glioma, Melanoma, p53 signaling pathway, Pathways in cancer, Prostate cancer, Ubiquitin mediated proteolysis

Product images:


Western blot analysis of extracts from HT29 cell using MDM2 (phospho-Ser166) Antibody

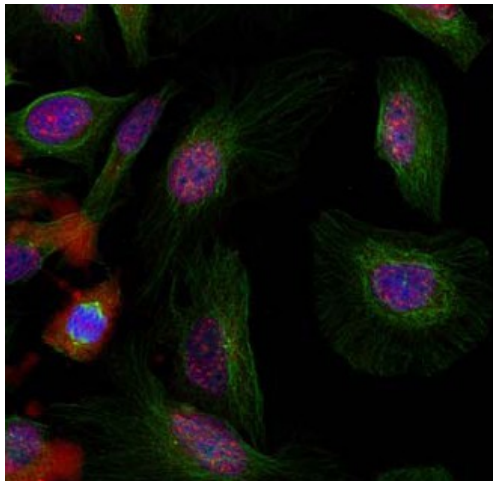


Western Blot analysis of extracts from 293 cells untreated or treated with Hydroxyurea using MDM2 (pSer166) antibody



Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using MDM2 (phospho-Ser166) Antibody

P-Peptide - +



Immunofluorescence staining of methanol-fixed HeLa cells using MDM2 (phospho-Ser166) Antibody