ARG54743
anti-MDM2 antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes MDM2.
Tested Reactivity	Hu, Ms
Tested Application	IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	MDM2
Species	Human
Immunogen	KLH-conjugated synthetic peptide corresponding to aa. 393-424 (C-terminus) of Human MDM2 (NP_001138809.1).
Conjugation	Un-conjugated
Alternate Names	EC 6.3.2.-; Double minute 2 protein; p53-binding protein Mdm2; hdm2; Oncoprotein Mdm2; HDMX; ACTFS; E3 ubiquitin-protein ligase Mdm2; Hdm2

Application Instructions

Application table

Application	Dilution
IHC-P	Assay-dependent
WB	1:1000

Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.
Positive Control	HepG2

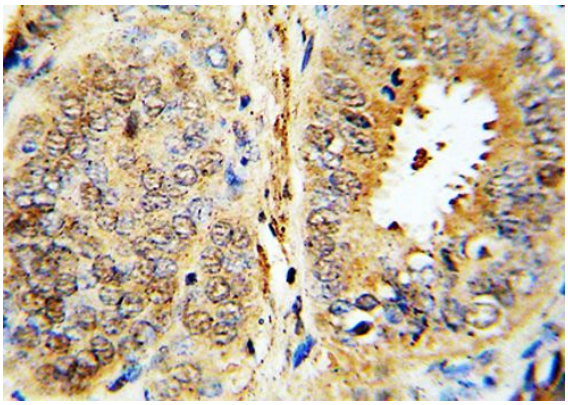
Properties

Purification	This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Buffer	PBS and 0.09% (W/V) Sodium azide
Preservative	0.09% (W/V) Sodium azide
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

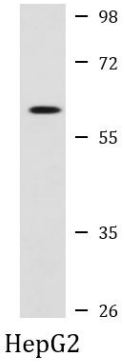
Database links	GeneID: 17246 Mouse GeneID: 4193 Human Swiss-port # P23804 Mouse Swiss-port # Q00987 Human
Gene Symbol	MDM2
Gene Full Name	MDM2 proto-oncogene, E3 ubiquitin protein ligase
Background	This gene encodes a nuclear-localized E3 ubiquitin ligase. The encoded protein can promote tumor formation by targeting tumor suppressor proteins, such as p53, for proteasomal degradation. This gene is itself transcriptionally-regulated by p53. Overexpression or amplification of this locus is detected in a variety of different cancers. There is a pseudogene for this gene on chromosome 2. Alternative splicing results in a multitude of transcript variants, many of which may be expressed only in tumor cells. [provided by RefSeq, Jun 2013]
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. [UniProt]
Research Area	Cancer antibody; Cell Biology and Cellular Response antibody; Gene Regulation antibody
Calculated Mw	55 kDa
PTM	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.

Images



ARG54743 anti-Mdm2 antibody IHC-P image

Immunohistochemistry: Formalin-fixed and paraffin-embedded Human prostate carcinoma stained with ARG54743 anti-Mdm2 antibody.



ARG54743 anti-Mdm2 antibody WB image

Western blot: 35 µg of HepG2 cell lysate stained with ARG54743 anti-Mdm2 antibody.