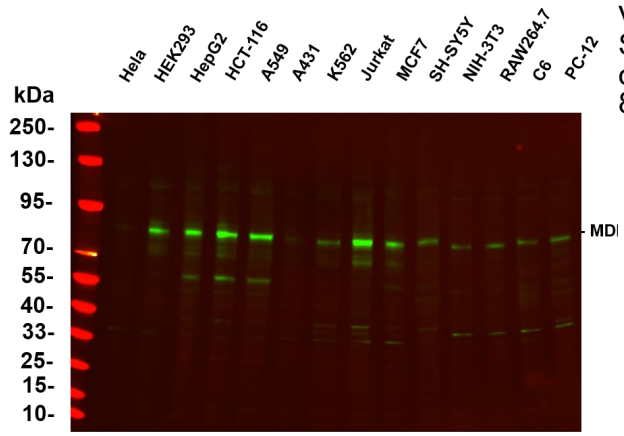
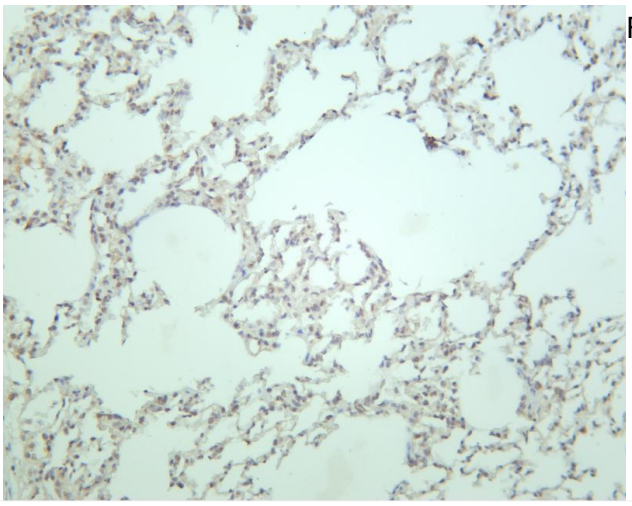
MDM2 Rabbit mAb

Catalog No	YP-rAb-17621
Isotype	IgG
Reactivity	Human,Mouse,Rat
Applications	WB,IHC,IF,IP,ELISA
Gene Name	MDM2
Protein Name	E3 ubiquitin-protein ligase Mdm2
Purification Process	Protein A
Specificity	Endogenous
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source	Monoclonal, Rabbit,IgG
Dilution	IHC 1:200-1:1000; WB 1:2000-1:10000; IF 1:200-1:1000; ELISA 1:5000-1:20000; IP 1:50-1:200; Note: For IHC, we suggest antigen retrieval with TE buffer pH 9.0
Concentration	0.5 mg/ml
Purity	≥90%
Storage Stability	-15° C to -25° C/1 year(Do not lower than -25° C)
Synonyms	MDM2 ; E3 ubiquitin-protein ligase Mdm2 ; Double minute 2 protein ; Hdm2 ; Oncoprotein Mdm2 ; p53-binding protein Mdm2
Observed Band	90kD
Calculated Molecular Weight	55kD
Cell Pathway	Cytoplasm,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.
Function	Disease:Seems to be amplified in certain tumors (including soft tissue sarcomas, osteosarcomas and gliomas). A higher frequency of splice variants lacking p53 binding domain sequences was found in late-stage and high-grade ovarian and bladder carcinomas. Four of the splice variants show loss of p53 binding.,Domain: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.,Function:Inhibits TP53/p53- and

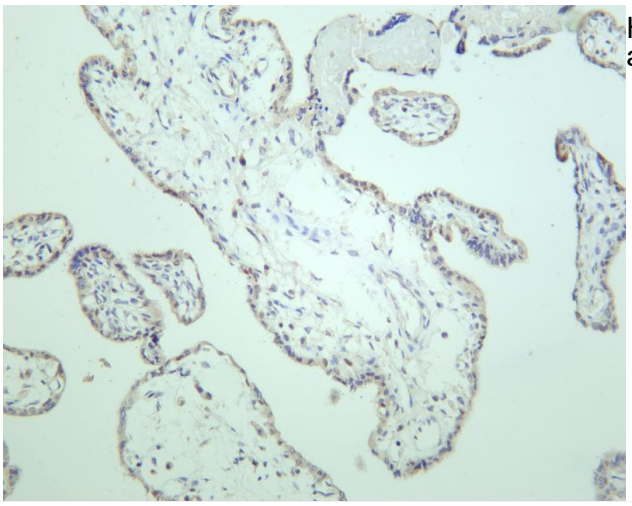
	TP73/p73-mediated cell cycle arrest and apoptosis by binding its transcriptional activation domain. Functions as a ubiquitin ligase E3, in the presence of E1 and E2, toward p53 and itself. Permits the nuclear export of p53 and targets it for proteasome-mediated proteolysis.,induction:By DNA damage.,miscellaneous:MDM2 RING finger mutations that failed to ubiquitinate p53 in vitro did not target p53 for degradation when expressed in cells.,online information:Mdm2 entry,PTM:Auto-ubiquitinated; which leads to proteasomal degradation.,PTM:Phosphorylated in response to ionizing radiation in an ATM-dependent manner.,similarity:Belongs to the MDM2/MDM4 family.,similarity:Contains 1 RanBP2-type zinc finger.,similarity:Contains 1 RING-type zinc finger.,similarity:Contains 1 SWIB domain.,subcellular location: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.,subunit:Binds p53, p73, ARF(P14), ribosomal protein L5 and specifically to RNA. Can interact also with retinoblastoma protein (RB), E1A-associated protein EP300 and the E2F1 transcription factor. Forms a ternary complex with TP53/p53 and WWOX. Interacts with CDKN2AIP, MTBP, TBRG1, USP7, PYHIN1 and UBXN6. Isoform Mdm2-F does not interact with TP53/p53. Interacts with and ubiquitinates HIV-1 Tat.,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.,
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],
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



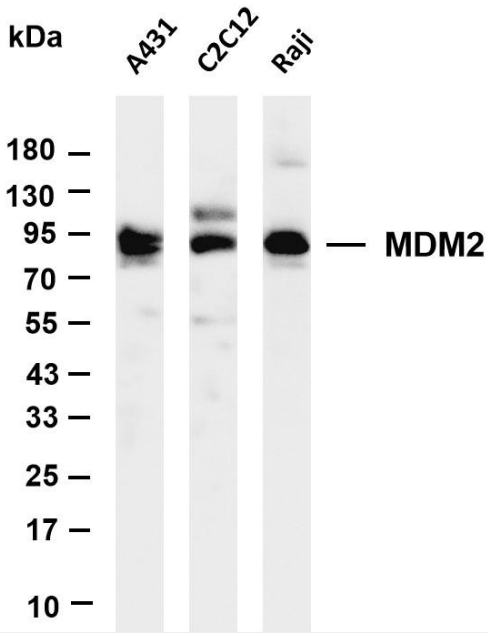
Various whole cell lysates were separated by 4-20% SDS-PAGE, and the primary antibody was used at 4～C, over night with a 1:5000 dilution . The Dylight 800-conjugated Goat anti-Rabbit antibody



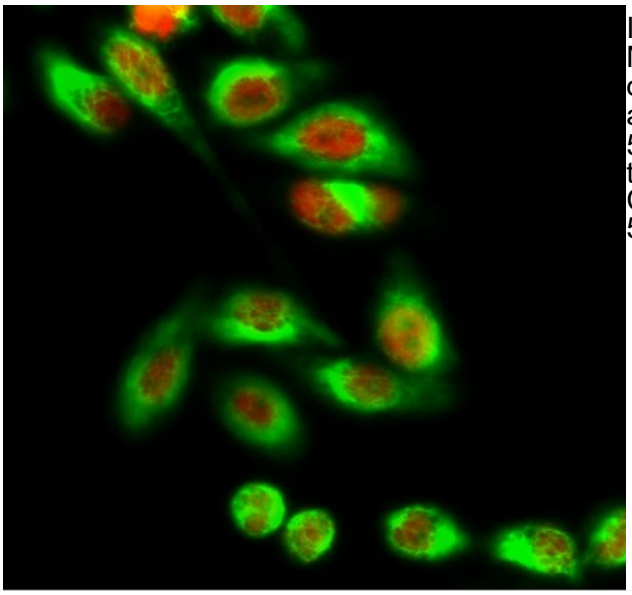
Rat lung was stained with anti-MDM2 rabbit antibody



Human placenta was stained with anti-MDM2 rabbit antibody



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-MDM2 antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: A431 Lane 2: C2C12 Lane 3: Raji Predicted band size: 55kDa Observed band size: 90kDa



Immunofluorescence analysis of Hela cell. 1,MDM2 Monoclonal Antibody(red) was diluted at 1:200(4° overnight). LC3B Monoclonal Antibody(green) was diluted at 1:200(4° overnight). 2, Goat Anti Rabbit Alexa Fluor 594 Catalog:RS3611 was diluted at 1:1000(room temperature, 50min). Goat Anti Mouse Alexa Fluor 488 Catalog:RS3208 was diluted at 1:1000(room temperature, 50min).