

# Anti-Phospho-p53 (S9) TP53 Rabbit Monoclonal Antibody

**Catalog # ABO13102** 

# Specification

## Anti-Phospho-p53 (S9) TP53 Rabbit Monoclonal Antibody - Product Information

Application WB
Primary Accession P04637
Host Rabbit Isotype Rabbit IgG
Reactivity Human
Clonality Monoclonal
Format Liquid

Description

Anti-Phospho-p53 (S9) TP53 Rabbit Monoclonal Antibody . Tested in WB application. This antibody reacts with Human.

# Anti-Phospho-p53 (S9) TP53 Rabbit Monoclonal Antibody - Additional Information

**Gene ID** 7157

#### **Other Names**

Cellular tumor antigen p53, Antigen NY-CO-13, Phosphoprotein p53, Tumor suppressor p53, TP53, P53

Calculated MW 43653 MW KDa

**Application Details** WB 1:500-1:2000

## **Subcellular Localization**

Cytoplasm. Nucleus. Nucleus, PML body. Endoplasmic reticulum. Mitochondrion matrix. Interaction with BANP promotes nuclear localization. Recruited into PML bodies together with CHEK2. Translocates to mitochondria upon oxidative stress.

## **Tissue Specificity**

Ubiquitous. Isoforms are expressed in a wide range of normal tissues but in a tissue-dependent manner. Isoform 2 is expressed in most normal tissues but is not detected in brain, lung, prostate, muscle, fetal brain, spinal cord and fetal liver. Isoform 3 is expressed in most normal tissues but is not detected in lung, spleen, testis, fetal brain, spinal cord and fetal liver. Isoform 7 is expressed in most normal tissues but is not detected in prostate, uterus, skeletal muscle and breast. Isoform 8 is detected only in colon, bone marrow, testis, fetal brain and intestine. Isoform 9 is expressed in most normal tissues but is not detected in brain, heart, lung, fetal liver, salivary gland, breast or intestine..

#### **Contents**

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.



## **Immunogen**

A synthesized peptide derived from human Phospho-p53 (S9)

**Purification** Affinity-chromatography

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

## Anti-Phospho-p53 (S9) TP53 Rabbit Monoclonal Antibody - Protein Information

Name TP53

Synonyms P53

#### **Function**

Multifunctional transcription factor that induces cell cycle arrest, DNA repair or apoptosis upon binding to its target DNA sequence (PubMed:<a href="http://www.uniprot.org/citations/11025664" target=" blank">11025664</a>, PubMed:<a href="http://www.uniprot.org/citations/12524540" target="\_blank">12524540</a>, PubMed:<a href="http://www.uniprot.org/citations/12810724" target=" blank">12810724</a>, PubMed:<a href="http://www.uniprot.org/citations/15186775" target="blank">15186775</a>, PubMed:<a href="http://www.uniprot.org/citations/15340061" target=" blank">15340061</a>, PubMed:<a href="http://www.uniprot.org/citations/17317671" target="blank">17317671</a>, PubMed:<a href="http://www.uniprot.org/citations/17349958" target="blank">17349958</a>, PubMed:<a href="http://www.uniprot.org/citations/19556538" target="blank">19556538</a>, PubMed:<a href="http://www.uniprot.org/citations/20673990" target="\_blank">20673990</a>, PubMed:<a href="http://www.uniprot.org/citations/20959462" target="blank">20959462</a>, PubMed:<a href="http://www.uniprot.org/citations/22726440" target="blank">22726440</a>, PubMed:<a href="http://www.uniprot.org/citations/24051492" target=" blank">24051492</a>, PubMed:<a href="http://www.uniprot.org/citations/24652652" target="blank">24652652</a>, PubMed:<a href="http://www.uniprot.org/citations/35618207" target="blank">35618207</a>, PubMed:<a href="http://www.uniprot.org/citations/36634798" target="blank">36634798</a>, PubMed:<a href="http://www.uniprot.org/citations/38653238" target="\_blank">38653238</a>, PubMed:<a href="http://www.uniprot.org/citations/9840937" target=" blank">9840937</a>). Acts as a tumor suppressor in many tumor types; induces growth arrest or apoptosis depending on the physiological circumstances and cell type (PubMed:<a href="http://www.uniprot.org/citations/11025664" target=" blank">11025664</a>, PubMed:<a href="http://www.uniprot.org/citations/12524540" target="blank">12524540</a>, PubMed:<a href="http://www.uniprot.org/citations/12810724" target="blank">12810724</a>, PubMed:<a href="http://www.uniprot.org/citations/15186775" target="blank">15186775</a>, PubMed:<a href="http://www.uniprot.org/citations/15340061" target="\_blank">15340061</a>, PubMed:<a href="http://www.uniprot.org/citations/17189187" target="blank">17189187</a>, PubMed:<a href="http://www.uniprot.org/citations/17317671" target="blank">17317671</a>, PubMed:<a href="http://www.uniprot.org/citations/17349958" target=" blank">17349958</a>, PubMed:<a href="http://www.uniprot.org/citations/19556538" target="blank">19556538</a>, PubMed:<a href="http://www.uniprot.org/citations/20673990" target="blank">20673990</a>, PubMed:<a  $href="http://www.uniprot.org/citations/20959462"\ target="\_blank">20959462</a>, PubMed:<a https://www.uniprot.org/citations/20959462" target="_blank">20959462</a>, PubMed:<a https://www.uniprot.org/citations/20959462$ href="http://www.uniprot.org/citations/22726440" target="\_blank">22726440</a>, PubMed:<a href="http://www.uniprot.org/citations/24051492" target="\_blank">24051492</a>, PubMed:<a href="http://www.uniprot.org/citations/24652652" target="blank">24652652</a>, PubMed:<a href="http://www.uniprot.org/citations/38653238" target="blank">38653238</a>, PubMed:<a href="http://www.uniprot.org/citations/9840937" target="blank">9840937</a>). Negatively regulates cell division by controlling expression of a set of genes required for this process (PubMed:<a href="http://www.uniprot.org/citations/11025664" target=" blank">11025664</a>,



PubMed: <a href="http://www.uniprot.org/citations/12524540" target="blank">12524540</a>, PubMed:<a href="http://www.uniprot.org/citations/12810724" target="blank">12810724</a>, PubMed:<a href="http://www.uniprot.org/citations/15186775" target="\_blank">15186775</a>, PubMed:<a href="http://www.uniprot.org/citations/15340061" target="\_blank">15340061</a>, PubMed:<a href="http://www.uniprot.org/citations/17317671" target="blank">17317671</a>, PubMed: <a href="http://www.uniprot.org/citations/17349958" target="blank">17349958</a>, PubMed: <a href="http://www.uniprot.org/citations/19556538" target="blank">19556538</a>, PubMed:<a href="http://www.uniprot.org/citations/20673990" target="blank">20673990</a>, PubMed: <a href="http://www.uniprot.org/citations/20959462" target="blank">20959462</a>, PubMed: <a href="http://www.uniprot.org/citations/22726440" target="\_blank">22726440</a>, PubMed:<a href="http://www.uniprot.org/citations/24051492" target="\_blank">24051492</a>, PubMed:<a href="http://www.uniprot.org/citations/24652652" target="\_blank">24652652</a>, PubMed: <a href="http://www.uniprot.org/citations/9840937" target="blank">9840937</a>). One of the activated genes is an inhibitor of cyclin-dependent kinases. Apoptosis induction seems to be mediated either by stimulation of BAX and FAS antigen expression, or by repression of Bcl-2 expression (PubMed:<a href="http://www.uniprot.org/citations/12524540" target=" blank">12524540</a>, PubMed:<a href="http://www.uniprot.org/citations/17189187" target=" blank">17189187</a>). Its pro-apoptotic activity is activated via its interaction with PPP1R13B/ASPP1 or TP53BP2/ASPP2 (PubMed:<a href="http://www.uniprot.org/citations/12524540" target=" blank">12524540</a>). However, this activity is inhibited when the interaction with PPP1R13B/ASPP1 or TP53BP2/ASPP2 is displaced by PPP1R13L/iASPP (PubMed:<a href="http://www.uniprot.org/citations/12524540" target=" blank">12524540</a>). In cooperation with mitochondrial PPIF is involved in activating oxidative stress-induced necrosis; the function is largely independent of transcription. Induces the transcription of long intergenic non-coding RNA p21 (lincRNA-p21) and lincRNA-Mkln1. LincRNA-p21 participates in TP53-dependent transcriptional repression leading to apoptosis and seems to have an effect on cell-cycle regulation. Implicated in Notch signaling cross-over. Prevents CDK7 kinase activity when associated to CAK complex in response to DNA damage, thus stopping cell cycle progression. Isoform 2 enhances the transactivation activity of isoform 1 from some but not all TP53-inducible promoters. Isoform 4 suppresses transactivation activity and impairs growth suppression mediated by isoform 1. Isoform 7 inhibits isoform 1-mediated apoptosis. Regulates the circadian clock by repressing CLOCK-BMAL1-mediated transcriptional activation of PER2 (PubMed:<a href="http://www.uniprot.org/citations/24051492" target=" blank">24051492</a>).

#### **Cellular Location**

Cytoplasm. Nucleus. Nucleus, PML body. Endoplasmic reticulum. Mitochondrion matrix. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome Note=Recruited into PML bodies together with CHEK2 (PubMed:12810724) Translocates to mitochondria upon oxidative stress (PubMed:22726440) Translocates to mitochondria in response to mitomycin C treatment (PubMed:27323408). Competitive inhibition of TP53 interaction with HSPA9/MOT-2 by UBXN2A results in increased protein abundance and subsequent translocation of TP53 to the nucleus (PubMed:24625977) [Isoform 2]: Nucleus. Cytoplasm. Note=Localized mainly in the nucleus with minor staining in the cytoplasm [Isoform 4]: Nucleus. Cytoplasm. Note=Predominantly nuclear but translocates to the cytoplasm following cell stress [Isoform 8]: Nucleus. Cytoplasm. Note=Localized in both nucleus and cytoplasm in most cells. In some cells, forms foci in the nucleus that are different from nucleoli

# **Tissue Location**

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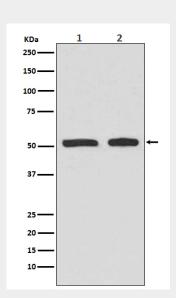


# Anti-Phospho-p53 (S9) TP53 Rabbit Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# Anti-Phospho-p53 (S9) TP53 Rabbit Monoclonal Antibody - Images



Western blot analysis of Phospho-p53 (Ser9) expression in (1)HepG2 cell lysates treated with etoposide; (2)HeLa cell lysates treated with etoposide.