

p53 (acetyl K382) Antibody

Rabbit mAb Catalog # AP90542

Specification

p53 (acetyl K382) Antibody - Product Information

Application WB, IHC, ICC Primary Accession P04637 Clonality Monoclonal

Other Names

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

Isotype Rabbit IgG
Host Rabbit
Calculated MW 53kDa KDa

p53 (acetyl K382) Antibody - Additional Information

Purification Affinity-chromatography

Immunogen A synthesized peptide derived from human

p53 (acetyl K382)

Description Acts as a tumor suppressor in many tumor

types; induces growth arrest or apoptosis

depending on the physiological

circumstances and cell type. Involved in cell cycle regulation as a trans-activator that acts to negatively regulate cell division by controlling a set of genes required for this process. 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.

Storage Condition and Buffer 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.

p53 (acetyl K382) Antibody - Protein Information

Name TP53

Synonyms P53

Function

Multifunctional transcription factor that induces cell cycle arrest, DNA repair or apoptosis upon



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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"
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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
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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>,
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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,
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this activity is inhibited when the interaction with PPP1R13B/ASPP1 or TP53BP2/ASPP2 is displaced by PPP1R13L/iASPP (PubMed:12524540). 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:24051492).

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

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

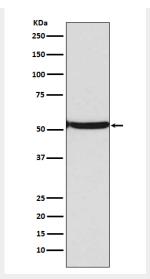
p53 (acetyl K382) Antibody - Protocols

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

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

p53 (acetyl K382) Antibody - Images





Western blot analysis of p53 (acetyl K382) expression in Jurkat cell lysate treated with etopside and TSA.