

Anti-P53 Antibody

Catalog # ABO10463

Product Information

Application	WB, IHC-P, IHC-F, ICC
Primary Accession	P10361
Host	Mouse
Isotype	Mouse IgG2a
Reactivity	Human
Clonality	Monoclonal
Format	Lyophilized
Description	Mouse IgG monoclonal antibody for p53, tumor protein p53 (TP53) detection. Tested with WB, IHC-P, IHC-F, ICC in Human. No cross reactivity with other proteins.
Reconstitution	Add 1ml of PBS buffer will yield a concentration of 100ug/ml.

Additional Information

Gene ID	24842
Other Names	Cellular tumor antigen p53, Tumor suppressor p53, Tp53, P53
Calculated MW	43451
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-2 µg/ml, Human, By Heat Immunocytochemistry , 1 µg/ml, Human, - Immunohistochemistry(Frozen Section), 0.5-2 µg/ml, Human, - Western blot, 0.5-1 µg/ml, Human
Subcellular Localization	Cytoplasm . Nucleus . Endoplasmic reticulum . Mitochondrion matrix . Interaction with BANP promotes nuclear localization. Translocates to mitochondria upon oxidative stress (By similarity). .
Tissue Specificity	TP53: Ubiquitous. Isoforms are expressed in a widerange of normal tissues but in a tissue-dependent manner. Isoform2 is expressed in most normal tissues but is not detected inbrain, lung, prostate, muscle, fetal brain, spinal cord and fetalliver. Isoform 3 is expressed in most normal tissues but is notdetected in lung, spleen, testis, fetal brain, spinal cord andfetal liver. Isoform 7 is expressed in most normal tissues but isnot detected in prostate, uterus, skeletal muscle and breast.Isoform 8 is detected only in colon, bone marrow, testis, fetalbrain and intestine. Isoform 9 is expressed in most normal tissuesbut is not detected in brain, heart, lung, fetal liver, salivarygland, breast or intestine.

Source	Eukaryota
Protein Name	Cellular tumor antigen p53
Contents	Mouse ascites fluid, 1.2% sodium acetate, 2mg BSA, with 0.01mg NaN ₃ as preservative.
Clone Names	BP53-12
Immunogen	Recombinant human wild-type p53 protein.
Purification	Ascites
Cross Reactivity	No cross reactivity with other proteins
Storage	At -20 °C for one year. After r ° Constitution, at 4 °C for one month. It ° Can also be aliquotted and stored frozen at -20 °C for a longer time.Avoid repeated freezing and thawing.
Sequence Similarities	Belongs to the p53 family.

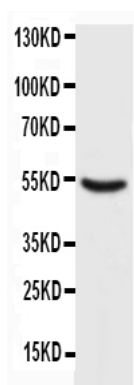
Protein Information

Name	Tp53
Synonyms	P53
Function	Multifunctional transcription factor that induces cell cycle arrest, DNA repair or apoptosis upon binding to its target DNA sequence. Acts as a tumor suppressor in many tumor types; induces growth arrest or apoptosis depending on the physiological circumstances and cell type. Negatively regulates cell division by controlling expression of 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. Its pro-apoptotic activity is activated via its interaction with PPP1R13B/ASPP1 or TP53BP2/ASPP2 (By similarity). However, this activity is inhibited when the interaction with PPP1R13B/ASPP1 or TP53BP2/ASPP2 is displaced by PPP1R13L/iASPP (By similarity). In cooperation with mitochondrial PPIF is involved in activating oxidative stress-induced necrosis; the function is largely independent of transcription. Prevents CDK7 kinase activity when associated to CAK complex in response to DNA damage, thus stopping cell cycle progression. 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. Regulates the circadian clock by repressing CLOCK-ARNTL/BMAL1-mediated transcriptional activation of PER2.
Cellular Location	Cytoplasm {ECO:0000250 UniProtKB:P04637}. Nucleus {ECO:0000250 UniProtKB:P04637}. Nucleus, PML body {ECO:0000250 UniProtKB:P04637}. Endoplasmic reticulum {ECO:0000250 UniProtKB:P04637}. Mitochondrion matrix {ECO:0000250 UniProtKB:P04637}. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome {ECO:0000250 UniProtKB:P04637} Note=Interaction with BANP promotes nuclear localization. Recruited into PML bodies together with CHEK2. Translocates to mitochondria upon oxidative stress. Translocates to mitochondria in response to mitomycin C treatment (By similarity). Competitive inhibition of TP53 interaction with HSPA9/MOT-2 by UBXN2A results in increased protein abundance and subsequent translocation of TP53 to the nucleus (By similarity)

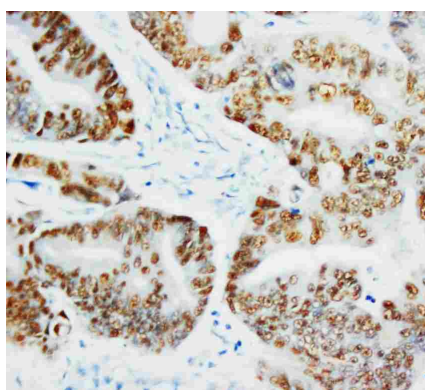
Background

The p53 tumor antigen is found in increased amounts in a wide variety of transformed cells. The protein is also detectable in many actively proliferating, nontransformed cells, but it is undetectable or present at low levels in resting cells. This protein induces cell cycle arrest or apoptosis in response to sublethal or severe DNA damage, respectively, by differential transcription of target genes and through transcription-independent apoptotic functions. The p53 protein contains 393 amino acids. Human p53 tumour antigen is located to band 17p13. p53 mutations are common in pancreatic cancer and are absent in chronic pancreatitis.

Images



Anti-p53 antibody (monoclonal), ABO10463, Western blottingWB: HL-60 Cell Lysate



Anti-p53 antibody (monoclonal), ABO10463, IHC(P)IHC(P): Human Mammary Cancer Tissue

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.