

Mouse p53 Monoclonal Antibody | anti-p53 antibody

p53 antibody

CATALOG # AAA225005	HOST Mouse	APPLICATIONS Western Blot, Immunohistochemistry, ELISA
-------------------------------	----------------------	--

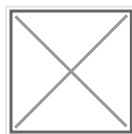
PRODUCT SYNONYMS

p53; Monoclonal Antibody; p53 antibody; Mouse monoclonal p53 antibody; Monoclonal p53 antibody; Anti-p53 antibody; p53 Oncoprotein antibody; p 53; p-53; p 53 antibody; p-53 antibody; BCC7 antibody; BOS_18908 antibody; brp53 antibody; cellular tumor antigen p53 antibody; drp53 antibody; EGK_08142 antibody; etID22686.5 antibody; fb40d06 antibody; LFS1 antibody; Li-Fraumeni syndrome antibody; p53 tumor suppressor antibody; p53 tumor suppressor phosphoprotein antibody; phosphoprotein p53 antibody; transformation related protein 53 antibody; transformation-related protein 53 antibody; trp53 antibody; anti-p53 antibody

PRODUCT SPECIFICATIONS

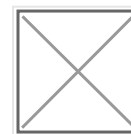
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Clone Number	4A8
Specificity	Monoclonal p53 antibody specific for human p53.
Form/Format	Liquid in ascitic fluid containing 0.03% sodium azide.
Concentration	1.0 mg/ml (varies by lot)
Sequence Length	393
Applicable Applications for anti-p53 antibody	WB (Western Blot), IHC (Immunohistochemistry), ELISA
Immunogen	p53 antibody was raised in Mouse using a purified recombinant fragment of human p53 expressed in E Coli as the immunogen.
Cross-Reactivity	Human
Post-Translational Modifications	p53 is modified post-translationally at multiple sites. DNA damage induces phosphorylation of p53 at S15, S20 and S37, reducing its interaction with the oncoprotein MDM2. MDM2 inhibits p53 accumulation by targeting it for ubiquitination and proteasomal degradation.
Preparation and Storage	Store at 4 degree C for short term storage. Store at -20 degree C for long term storage. Avoid repeated freeze/thaw cycles.

IMAGES



IHC (Immunohistochemistry)

Immunohistochemical analysis of paraffin-embedded human esophageal cancer (left) and lung cancer (right), showing nuclear localization using p53 antibody with DAB staining.



WB (Western Blot)

Western Blot showing p53 antibody used against HEK293 cell lysate (1).



Application Data

ADDITIONAL INFORMATION

Related Product Information for anti-p53 antibody	Biological Significance: p53 responds to diverse cellular stresses to regulate target genes that induce cell cycle arrest, apoptosis, senescence, DNA repair, or changes in metabolism. p53 protein is expressed at low level in normal cells and at a high level in a variety of transformed cell lines, where its believed to contribute to transformation and malignancy. p53 is a DNA-binding protein containing transcription activation, DNA-binding, and oligomerization domains. It is postulated to bind to a p53-binding site and activate expression of downstream genes that inhibit growth and/or invasion, and thus function as a tumor suppressor. Mutants of p53 that frequently occur in a number of different human cancers fail to bind the consensus DNA binding site, and hence cause the loss of tumor suppressor activity. Alterations of this gene occur not only as somatic mutations in human malignancies, but also as germline mutations in some cancerprone families with Li-Fraumeni syndrome. Sequence Info: Member of the p53 family. Cytogenetic Location: 17p13.1 Molecular Location on chromosome 17: base pairs 7, 668, 401 to 7, 687, 549 Implications in Disease: Defects in p53 expression are a cause in several melanomas including lung cancer. If the TP53 gene is damaged, tumor suppression is severely reduced. People who inherit only one functional copy of the TP53 gene will most likely develop tumors in early adulthood, a disorder known as Li-Fraumeni syndrome. The TP53 gene can also be damaged in cells by mutagens (chemicals, radiation, or viruses), increasing the likelihood that the cell will begin decontrolled division. More than 50 percent of human tumors contain a mutation or deletion of the TP53 gene. Expression Note: High levels of p53 expression were found in many cancers; and the overexpression of an apparently wild-type TP53 gene transformed a normal cell into a cancer cell. P53 is widely dispersed in the cytoplasm, nucleus and endoplasmic reticulum. Localization is predominantly nuclear but translocates to the cytoplasm. Following cell stress, cytoplasmic p53 is directed to mitochondria where it interacts with pro-and anti-apoptotic members of the Bcl2 family, resulting in the release of factors from the mitochondria that drive apoptosis.
Product Categories/Family for anti-p53 antibody	Differentiation & Development

NCBI AND UNIPROT INFORMATION

NCBI GI #	269849759
NCBI GeneID	7157
UniProt Accession #	P04637 ; Q15086 ; Q15087 ; Q15088 ; Q16535 ; Q16807 ; Q16808 ; Q16809 ; Q16810 ; Q16811 ; Q16848 ; Q2XN98
Molecular Weight	24,401 Da
NCBI Official Full Name	Cellular tumor antigen p53
NCBI Official Synonym Full Names	tumor protein p53
NCBI Official Symbol	TP53
NCBI Official Synonym Symbols	P53; BCC7; LFS1; TRP53
NCBI Protein Information	cellular tumor antigen p53
UniProt Protein Name	Cellular tumor antigen p53
UniProt Gene Name	TP53
UniProt Synonym Gene Names	P53

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.