



# p53 (Acetyl K319) Polyclonal Antibody

<b>Catalog No</b>	YP-Ab-00044
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Mouse;Rat
<b>Applications</b>	WB;IHC;IF;ELISA
<b>Gene Name</b>	TP53
<b>Protein Name</b>	Cellular tumor antigen p53
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human p53 around the acetylated site of Lys317. AA range:283-332
<b>Specificity</b>	Acetyl-p53 (K317) Polyclonal Antibody detects endogenous levels of p53 protein only when acetylated at K317.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/10000. Not yet tested in other applications.
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	TP53; P53; Cellular tumor antigen p53; Antigen NY-CO-13; Phosphoprotein p53; Tumor suppressor p53
<b>Observed Band</b>	43kD
<b>Cell Pathway</b>	Cytoplasm . Nucleus . Nucleus, PML body . Endoplasmic reticulum . Mitochondrion matrix . Cytoplasm, cytoskeleton, microtubule organizing center, centrosome . 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). .; [Isoform 1]: Nucleus . Cytoplasm. Predominantly nuclear but localizes to the cytoplasm when expressed with isoform 4.; [Isoform 2]: Nucleus. Cytoplasm. Localized mainly in the nucleus with minor staining in the cytoplasm.; [Isoform 3]: Nucleus. Cytoplasm. Localized in the nucleus in most cells but found in the cytoplasm in some cells.; [Isoform 4]: Nucleus. Cytoplasm. Predominantly nuclear but translocates to the cy
<b>Tissue Specificity</b>	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.

**Function**

cofactor: Binds 1 zinc ion per subunit., disease: Defects in TP53 are a cause of choroid plexus papilloma [MIM:260500]. Choroid plexus papilloma is a slow-growing benign tumor of the choroid plexus that often invades the leptomeninges. In children it is usually in a lateral ventricle but in adults it is more often in the fourth ventricle. Hydrocephalus is common, either from obstruction or from tumor secretion of cerebrospinal fluid. If it undergoes malignant transformation it is called a choroid plexus carcinoma. Primary choroid plexus tumors are rare and usually occur in early childhood., disease: Defects in TP53 are a cause of Li-Fraumeni syndrome (LFS) [MIM:151623]. LFS is an autosomal dominant familial cancer syndrome that in its classic form is defined by the existence of a proband affected by a sarcoma before 45 years with a first degree relative affected by any tumor before 45 years a

**Background**

tumor protein p53(TP53) Homo sapiens This gene encodes a tumor suppressor protein containing transcriptional activation, DNA binding, and oligomerization domains. The encoded protein responds to diverse cellular stresses to regulate expression of target genes, thereby inducing cell cycle arrest, apoptosis, senescence, DNA repair, or changes in metabolism. Mutations in this gene are associated with a variety of human cancers, including hereditary cancers such as Li-Fraumeni syndrome. Alternative splicing of this gene and the use of alternate promoters result in multiple transcript variants and isoforms. Additional isoforms have also been shown to result from the use of alternate translation initiation codons (PMIDs: 12032546, 20937277). [provided by RefSeq, Feb 2013],

**matters needing attention**

Avoid repeated freezing and thawing!

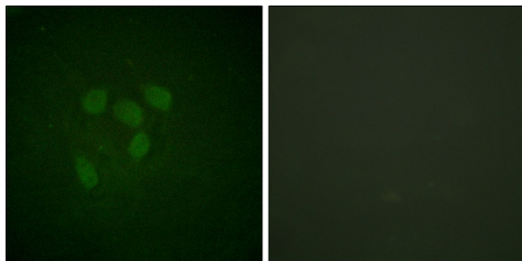
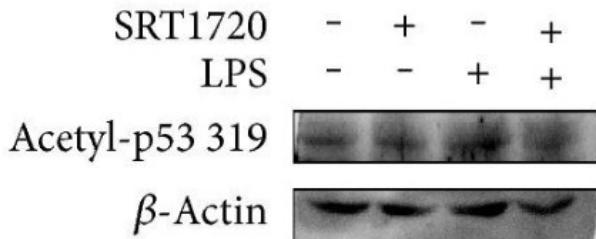
**Usage suggestions**

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

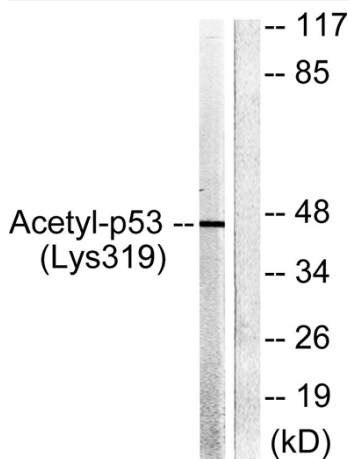


## Products Images

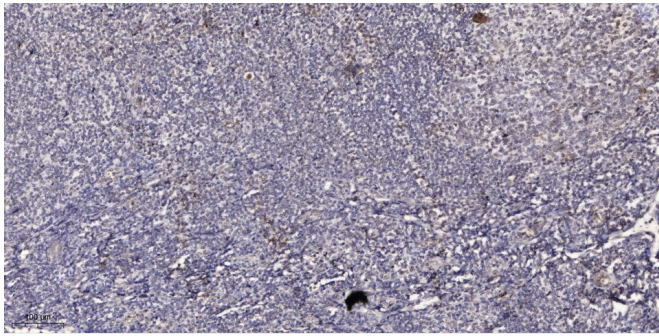
Zhang, Weijin, et al. "Sirt1 protects endothelial cells against LPS-induced barrier dysfunction." *Oxidative medicine and cellular longevity* 2017 (2017).



Immunofluorescence analysis of HeLa cells, using p53 (Acetyl-Lys317) Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from HeLa cells, treated with TSA 400nM 24h, using p53 (Acetyl-Lys317) Antibody. The lane on the right is blocked with the synthesized peptide.



Immunohistochemical analysis of paraffin-embedded human tonsil. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).