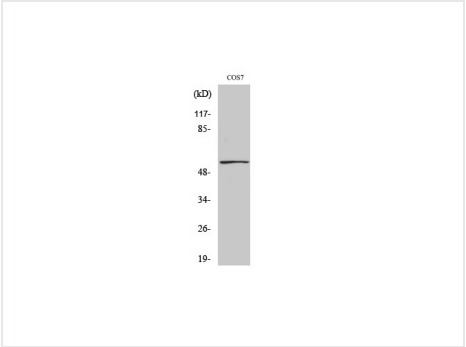
p53 Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

Product Name	p53, Polyclonal Antibody
Full Product Name	Phospho-p53 (S9) Polyclonal Antibody
Product Gene Name	anti-p53 antibody
Product Synonym Names	TP53; P53; Cellular tumor antigen p53; Antigen NY-CO-13; Phosphoprotein p53; Tumor suppressor p53
Clonality	Polyclonal
Isotype	IgG
Host	Rabbit
Species Reactivity	Human, Monkey
Purity/Purification	Antigen Affinity Purified
Concentration	1mg/ml (lot specific)
Preparation and Storage	Store at -20 degree C. Avoid freeze / thaw cycles.
Molecular Weight	Calculated MW: 44 kDa
OMIM	133239
Immunogen	Synthesized peptide derived from human p53 around the phosphorylation site of S9.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Product Categories/Family for anti-p53 antibody	Phospho Antibodies
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Applications Tested/Suitable for anti-p53 antibody	Western Blot (WB), Immunohistochemistry (IHC), ELISA (EIA)
Application Notes for anti-p53 antibody	WB: 1:500-1:2000, IHC: 1:50-1:200, ELISA: 1:5000-1:20000
Related Product Information for anti-p53 antibody	MBS2536037 is an antibody targeting p53. Also known as Phospho-p53 (S9) Polyclonal Antibody. Reactive in Human, Monkey. Host: Rabbit.
Other Notes	Small volumes of anti-p53 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.



Western Blot (WB) of anti-p53 antibody
Western Blot analysis of various cells with Phospho-p53 (Ser9) Polyclonal Antibody at dilution of 1:2000

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for p53. It may not necessarily be applicable to this product.

NCBI GI #	23491729
NCBI GeneID	7157
NCBI Accession #	BAC16799.1
UniProt Secondary Accession #	Q15086; Q15087; Q15088; Q16535; Q16807; Q16808; Q16809; Q16810; Q16811; Q16848; Q2XN98
UniProt Related Accession #	P04637
NCBI Official Full Name	P53
NCBI Official Synonym Full Names	tumor protein p53
NCBI Official Symbol	TP53
NCBI Official Synonym Symbols	P53; BCC7; LFS1; TRP53
UniProt Protein Name	Cellular tumor antigen p53
UniProt Synonym Protein Names	Antigen NY-CO-13; Phosphoprotein p53; Tumor suppressor p53
Protein Family	p53 and DNA damage-regulated protein
UniProt Gene Name	TP53
UniProt Synonym Gene Names	P53
UniProt Entry Name	P53_HUMAN
NCBI Protein Information	cellular tumor antigen p53
NCBI Summary for p53	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]

UniProt Comments for p53	p53: a transcription factor and major tumor suppressor that plays a major role in regulating cellular responses to DNA damage and other genomic aberrations. Activation of p53 can lead to either cell cycle arrest and DNA repair or apoptosis. More than 50 percent of human tumors contain a mutation or deletion of the TP53 gene. 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. Phosphorylated by many kinases including Chk2 and Chk1 at S20, enhancing its tetramerization, stability and activity. The phosphorylation by CAK at S392 is increased in human tumors and has been reported to influence the growth suppressor function, DNA binding and transcriptional activation of p53. Phosphorylation of p53 at S46 regulates the ability of p53 to induce apoptosis. The acetylation of p53 appears to play a positive role in the accumulation of p53 during the stress response. Following DNA damage, p53 becomes acetylated at K382, enhancing its binding to DNA. Deacetylation of p53 can occur through interaction with SIRT1, a deacetylase that may be involved in cellular aging and the DNA damage response. p53 regulates the transcription of a set of genes encoding endosomal proteins that regulate endosomal functions. These include STEAP3 and CHMP4C, which enhance exosome production, and CAV1 and CHMP4C, which produce a more rapid endosomal clearance of the EGFR from the plasma membrane. DNA damage regulates a p53-mediated secretory pathway, increasing the secretion of some proteins such as Hsp90, SERPINE1, SERPINB5, NKEF-A, and CyPA, and inhibiting the secretion of others including CTSL and IGFBP-2. Two alternatively spliced human isoforms have been reported. Isoform 2 is expressed in quiescent lymphocytes. Seems to be non-functional. May be produced at very low levels due to a premature stop codon in the mRNA, leading to nonsense-mediated mRNA decay. Protein type: Transcription factor; DNA-binding; Nuclear receptor co-regulator; Motility/polarity/chemotaxis; Activator; Tumor suppressor Chromosomal Location of Human Ortholog: 17p13.1 Cellular Component: cytoplasm; cytosol; endoplasmic reticulum; mitochondrial matrix; mitochondrion; nuclear body; nuclear chromatin; nuclear matrix; nucleolus; nucleoplasm; nucleus; PML body; protein complex; replication fork; transcription factor TFIID complex Molecular Function: ATP binding; chaperone binding; chromatin binding; copper ion binding; damaged DNA binding; DNA binding; double-stranded DNA binding; enzyme binding; histone acetyltransferase binding; histone deacetylase regulator activity; identical protein binding; p53 binding; protease binding; protein binding; protein heterodimerization activity; protein kinase binding; protein N-terminus binding; protein phosphatase 2A binding; protein phosphatase binding; protein self-association; receptor tyrosine kinase binding; sequence-specific DNA binding; transcription factor activity; transcription factor binding; ubiquitin protein ligase binding; zinc ion binding Biological Process: apoptosis; B cell lineage commitment; base-excision repair; blood coagulation; cell aging; cell cycle arrest; cell differentiation; cell proliferation; cellular response to glucose starvation; cerebellum development; chromatin assembly; chromosome breakage; circadian behavior; determination of adult life span; DNA damage response, signal transduction by p53 class mediator; DNA damage response, signal transduction by p53 class mediator resulting in cell cycle arrest; DNA damage response, signal transduction by p53 class mediator resulting in induction of apoptosis; DNA damage response, signal transduction by p53 class mediator resulting in transcription of p21 class mediator; DNA repair; DNA strand renaturation; double-strand break repair; embryonic organ development; entrainment of circadian clock by photoperiod; ER overload response; G1 DNA damage checkpoint; gastrulation; gene expression; in utero embryonic development; mitochondrial DNA repair; multicellular organism growth; multicellular organismal development; negative regulation of apoptosis; negative regulation of cell growth; negative regulation of cell proliferation; negative regulation of fibroblast proliferation; negative regulation of helicase activity; negative regulation of neuroblast proliferation; negative regulation of proteolysis; negative regulation of telomerase activity; negative regulation of transcription from RNA polymerase II promoter; negative regulation of transcription, DNA-dependent; negative regulation of transforming growth factor beta receptor signaling pathway; neuron apoptosis; Notch signaling pathway; nucleotide-excision repair; positive regulation of apoptosis; positive regulation of histone deacetylation; positive regulation of neuron apoptosis; positive regulation of peptidyl-tyrosine phosphorylation; positive regulation of protein oligomerization; positive regulation of transcription from RNA polymerase II promoter; positive regulation of transcription, DNA-dependent; programmed cell death; protein complex assembly; protein import into nucleus, translocation; protein localization; protein tetramerization; Ras protein signal transduction; regulation of apoptosis; regulation of mitochondrial membrane permeability; regulation of tissue remodeling; regulation of transcription, DNA-dependent; release of cytochrome c from mitochondria; response to antibiotic; response to DNA damage stimulus; response to gamma radiation; response to salt stress; response to X-ray; rRNA transcription; somitogenesis; T cell differentiation in the thymus; T cell lineage commitment; T cell proliferation during immune response; transcription initiation from RNA polymerase II promoter; transforming growth factor beta receptor signaling pathway; viral reproduction Disease: Adrenocortical Carcinoma, Hereditary; Basal Cell Carcinoma, Susceptibility To, 7; Breast Cancer; Colorectal Cancer; Glioma Susceptibility 1; Hepatocellular Carcinoma; Li-fraumeni Syndrome 1; Nasopharyngeal Carcinoma; Osteogenic Sarcoma; Pancreatic Cancer; Papilloma Of Choroid Plexus

Research Articles on p53	**1.** LATS1 and LATS2 are frequently down-regulated in breast cancer; we propose that such down-regulation might benefit cancer by converting p53 from a tumor suppressor into a tumor facilitator
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
Disclaimer	While every efforts were made to ensure the accuracy of the information provided in this datasheet, MyBioSource will not be liable for any omissions or errors contained herein. MyBioSource reserves the right to make changes to this datasheet at any time without prior notice. It is the responsibility of the customer to report product performance issues to MyBioSource within 30 days of receipt of the product. Please visit our Terms & Conditions page for more information.
Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

For Research Use Only. Not for use in diagnostic or therapeutic procedures.

MyBioSource | Tel: +1.858.633.0165 | Fax: +1.858.633.0166 | mybiosource.com/contact-us
Online datasheet: https://www.mybiosource.com/polyclonal-human-monkey-antibody/p53/2536037