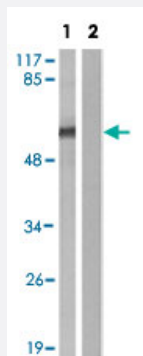


TP53 polyclonal antibody

Catalog # PAB16989 Size 100 ug

Applications

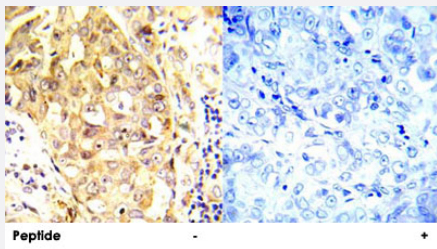


Western Blot (Cell lysate)

Western blot analysis of extracts from COS-7 cells.

Lane 1 : Using TP53 polyclonal antibody (Cat # PAB16989).

Lane 2 : Using the same antibody preincubated with synthesized peptide.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using TP53 polyclonal antibody (Cat # PAB16989).

Specification

Product Description	Rabbit polyclonal antibody raised against synthetic peptide of TP53.
Immunogen	A synthetic peptide corresponding to residues surrounding S20 of human TP53.
Host	Rabbit
Reactivity	Human, Mouse
Specificity	This antibody detects endogenous levels of total TP53 protein.
Form	Liquid

Recommend Usage	Western Blot (1:500-1:1000) Immunohistochemistry (1:50-1:100) ELISA (1:20000) The optimal working dilution should be determined by the end user.
Storage Buffer	In 20 mM PBS, 0.15 M NaCl, pH 7.2 (0.01% sodium azide)
Storage Instruction	Store at 4°C for three months. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Western Blot (Cell lysate)

Western blot analysis of extracts from COS-7 cells.

Lane 1 : Using TP53 polyclonal antibody (Cat # PAB16989).

Lane 2 : Using the same antibody preincubated with synthesized peptide.

- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using TP53 polyclonal antibody (Cat # PAB16989).

- Enzyme-linked Immunoabsorbent Assay

Gene Info — TP53

Entrez GeneID	7157
Protein Accession#	P04637
Gene Name	TP53
Gene Alias	FLJ92943, LFS1, TRP53, p53
Gene Description	tumor protein p53
Omim ID	114480 114500 114550 151623 161550 191170 202300 260350
Gene Ontology	Hyperlink

Gene Summary

This gene encodes tumor protein p53, which 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 it's 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 cancer-prone families with Li-Fraumeni syndrome. Multiple p53 variants due to alternative promoters and multiple alternative splicing have been found. These variants encode distinct isoforms, which can regulate p53 transcriptional activity. [provided by RefSeq]

Other Designations

p53 antigen|p53 transformation suppressor|p53 tumor suppressor|phosphoprotein p53|transformation-related protein 53

Publication Reference

- [An ATM- and Rad3-related \(ATR\) signaling pathway and a phosphorylation-acetylation cascade are involved in activation of p53/p21Waf1/Cip1 in response to 5-aza-2'-deoxycytidine treatment.](#)

Wang H, Zhao Y, Li L, McNutt MA, Wu L, Lu S, Yu Y, Zhou W, Feng J, Chai G, Yang Y, Zhu WG.

The Journal of Biological Chemistry 2007 Oct; 283(5):2564.

- [Phosphorylation of human p53 at serine 46 determines promoter selection and whether apoptosis is attenuated or amplified.](#)

Mayo LD, Seo YR, Jackson MW, Smith ML, Rivera Guzman J, Korgaonkar CK, Donner DB.

The Journal of Biological Chemistry 2005 Apr; 280(28):25953.

- [Phosphorylation of p53 on key serines is dispensable for transcriptional activation and apoptosis.](#)

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The Journal of Biological Chemistry 2004 Oct; 279(51):53015.

Pathway

- [Amyotrophic lateral sclerosis \(ALS\)](#)
- [Apoptosis](#)
- [Basal cell carcinoma](#)
- [Bladder cancer](#)

- [Cell cycle](#)
- [Chronic myeloid leukemia](#)
- [Colorectal cancer](#)
- [Endometrial cancer](#)
- [Glioma](#)
- [MAPK signaling pathway](#)
- [Melanoma](#)
- [Neurotrophin signaling pathway](#)
- [Non-small cell lung cancer](#)
- [p53 signaling pathway](#)
- [Pancreatic cancer](#)
- [Pathways in cancer](#)
- [Prostate cancer](#)
- [Small cell lung cancer](#)
- [Thyroid cancer](#)
- [Wnt signaling pathway](#)

Disease

- [Abortion](#)
- [Acquired Hyperostosis Syndrome](#)
- [Acute Disease](#)
- [Adenocarcinoma](#)
- [Adenoma](#)
- [Adenomatous Polyposis Coli](#)
- [Adrenal Cortex Neoplasms](#)
- [Albuminuria](#)

- [Alcoholism](#)
- [Alzheimer disease](#)
- [Ameloblastoma](#)
- [Aneuploidy](#)
- [Anoxia](#)
- [Anus Neoplasms](#)
- [Arsenic Poisoning](#)
- [Arthritis](#)
- [Astrocytoma](#)
- [Ataxia telangiectasia](#)
- [Atherosclerosis](#)
- [Autoimmune Diseases](#)
- [Azoospermia](#)
- [Balkan Nephropathy](#)
- [Barrett Esophagus](#)
- [Bipolar Disorder](#)
- [Bone Neoplasms](#)
- [Brain Infarction](#)
- [Brain Injuries](#)
- [Brain Ischemia](#)
- [Brain Neoplasms](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Carcinoma](#)
- [Carcinoma in Situ](#)
- [Cardiovascular Diseases](#)

- [Carotid Artery Diseases](#)
- [Carotid Artery Thrombosis](#)
- [Cell Transformation](#)
- [Cerebellar Neoplasms](#)
- [Cerebral Infarction](#)
- [Cervical Intraepithelial Neoplasia](#)
- [Chagas Disease](#)
- [Cholecystitis](#)
- [Choriocarcinoma](#)
- [Choroid Plexus Neoplasms](#)
- [Chromosomal Instability](#)
- [Chromosome Aberrations](#)
- [Chromosome Deletion](#)
- [Chronic Disease](#)
- [Cicatrix](#)
- [Cocarcinogenesis](#)
- [Cognition Disorders](#)
- [Colitis](#)
- [Colon cancer](#)
- [Colonic Neoplasms](#)
- [Colorectal Neoplasms](#)
- [Condylomata Acuminata](#)
- [Conjunctival Neoplasms](#)
- [Constriction](#)
- [Coronary Artery Disease](#)
- [Coronary Disease](#)

- [Coronary Restenosis](#)
- [Craniocerebral Trauma](#)
- [Crohn Disease](#)
- [Cystadenocarcinoma](#)
- [Delayed Graft Function](#)
- [Depressive Disorder](#)
- [Diabetes Mellitus](#)
- [Diabetic Nephropathies](#)
- [Digestive System Neoplasms](#)
- [Disease Progression](#)
- [Disease Susceptibility](#)
- [DNA Damage](#)
- [Down Syndrome](#)
- [Duodenal Ulcer](#)
- [Edema](#)
- [Ehlers-Danlos Syndrome](#)
- [Endometrial Hyperplasia](#)
- [Endometrial Neoplasms](#)
- [Endometriosis](#)
- [Epidermodysplasia Verruciformis](#)
- [Epstein-Barr Virus Infections](#)
- [Esophageal Neoplasms](#)
- [Fallopian Tube Neoplasms](#)
- [Gallbladder Neoplasms](#)
- [Ganglioglioma](#)
- [Gastritis](#)

- [Gastroesophageal Reflux](#)
- [Gastrointestinal Neoplasms](#)
- [Gastrointestinal Stromal Tumors](#)
- [Genetic Diseases](#)
- [Genetic Predisposition to Disease](#)
- [Genital Neoplasms](#)
- [Genomic Instability](#)
- [Glaucoma](#)
- [Glioblastoma](#)
- [Glioma](#)
- [Graft Occlusion](#)
- [Graves Disease](#)
- [Hashimoto Disease](#)
- [Head and Neck Neoplasms](#)
- [Helicobacter Infections](#)
- [Hematologic Diseases](#)
- [Hepatitis B](#)
- [Hepatitis C](#)
- [Herpes Simplex](#)
- [HIV Infections](#)
- [Hodgkin Disease](#)
- [Hydatidiform Mole](#)
- [Hypopharyngeal Neoplasms](#)
- [Hypotension](#)
- [Infertility](#)

- [Inflammation](#)
- [Inflammatory Bowel Diseases](#)
- [Intestinal Neoplasms](#)
- [Intracranial Thrombosis](#)
- [Keloid](#)
- [Keratoses](#)
- [Kidney Failure](#)
- [Kidney Neoplasms](#)
- [Laryngeal Neoplasms](#)
- [Leber hereditary optic neuropathy](#)
- [Leiomyoma](#)
- [Leukemia](#)
- [Leukoplakia](#)
- [Lichen Planus](#)
- [Li-Fraumeni Syndrome](#)
- [Lissencephaly](#)
- [Liver Cirrhosis](#)
- [Liver Neoplasms](#)
- [Low Tension Glaucoma](#)
- [Lung Neoplasms](#)
- [Lupus Erythematosus](#)
- [Lupus Nephritis](#)
- [Lymphatic Metastasis](#)
- [Lymphoma](#)
- [Lymphoproliferative Disorders](#)
- [Malignant melanoma](#)
- [Medulloblastoma](#)

- [Melanoma](#)
- [Meningeal Neoplasms](#)
- [Meningioma](#)
- [Mental Retardation](#)
- [Metaplasia](#)
- [Microsatellite Instability](#)
- [Mouth Neoplasms](#)
- [Multiple Myeloma](#)
- [Multiple Sclerosis](#)
- [Myelodysplastic Syndromes](#)
- [Nasopharyngeal Neoplasms](#)
- [Neoplasm Invasiveness](#)
- [Neoplasm Metastasis](#)
- [Neoplasm Recurrence](#)
- [Neoplasms](#)
- [Nerve Sheath Neoplasms](#)
- [Neural Tube Defects](#)
- [Neurilemmoma](#)
- [Neuroectodermal Tumors](#)
- [Neurofibroma](#)
- [Neurofibromatosis](#)
- [Neurofibromatosis 2](#)
- [Neuroma](#)
- [Neuropsychological Tests](#)
- [Neutropenia](#)
- [Nijmegen Breakage Syndrome](#)

- [Nose Neoplasms](#)
- [Obesity](#)
- [Occupational Diseases](#)
- [Ocular Hypertension](#)
- [Oligodendroglioma](#)
- [Oligospermia](#)
- [Optic Atrophy](#)
- [Oral Submucous Fibrosis](#)
- [Oropharyngeal Neoplasms](#)
- [Osteoarthritis](#)
- [Osteosarcoma](#)
- [Ovarian cancer](#)
- [Ovarian Neoplasms](#)
- [Pancreatic cancer](#)
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- [Papilloma](#)
- [Papillomavirus Infections](#)
- [Pemphigus](#)
- [Penile Neoplasms](#)
- [Peptic Ulcer](#)
- [Peritoneal Neoplasms](#)
- [Pharyngeal Neoplasms](#)
- [Postoperative Complications](#)
- [Precancerous Conditions](#)
- [Prostate cancer](#)
- [Prostatic Hyperplasia](#)

- [Prostatic Intraepithelial Neoplasia](#)
- [Prostatic Neoplasms](#)
- [Psoriasis](#)
- [Pterygium](#)
- [Pulmonary Disease](#)
- [Pulmonary Fibrosis](#)
- [Radiation Injuries](#)
- [Radiodermatitis](#)
- [Rectal Neoplasms](#)
- [Recurrence](#)
- [Roseolovirus Infections](#)
- [Sarcoma](#)
- [Schizophrenia](#)
- [Skin Diseases](#)
- [Skin Neoplasms](#)
- [Small Cell Lung Carcinoma](#)
- [Spinal Dysraphism](#)
- [Stomach Neoplasms](#)
- [Stomach Ulcer](#)
- [Subarachnoid Hemorrhage](#)
- [Substance-Related Disorders](#)
- [Sunburn](#)
- [The p53 tumor suppressor protein](#)
- [Thyroid Diseases](#)
- [Thyroid Neoplasms](#)
- [Thyroiditis](#)

- [Tobacco Use Disorder](#)
- [Tongue Neoplasms](#)
- [Tumor Virus Infections](#)
- [Uremia](#)
- [Urinary Bladder Neoplasms](#)
- [Urologic Diseases](#)
- [Uterine Cervical Diseases](#)
- [Uterine Cervical Dysplasia](#)
- [Uterine Cervical Neoplasms](#)
- [Uterine Neoplasms](#)
- [Waldenstrom Macroglobulinemia](#)
- [Wegener Granulomatosis](#)
- [Werner syndrome](#)