

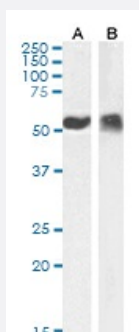
RecomAb™

TP53 monoclonal antibody, clone PAb421

Catalog # RAB01077 Size 200 ug

Applications

Western Blot (Cell lysate)



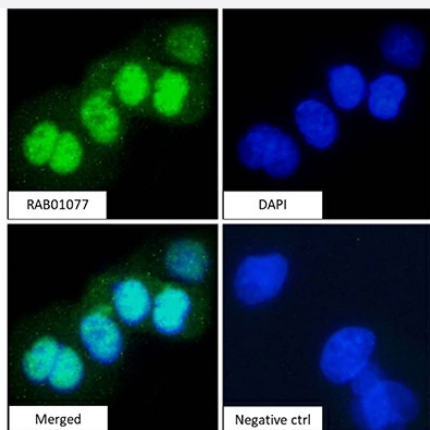
Western blot analysis of TP53 monoclonal antibody, clone PAb421 (Cat # RAB01077).

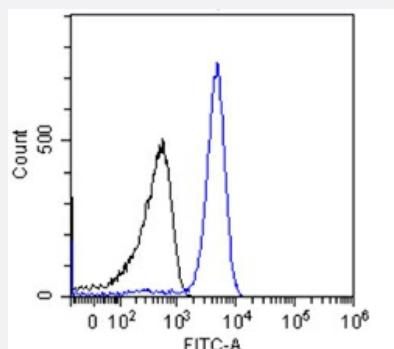
A431 cell nuclear (A) and cytoplasmic (B) extract (35 ug protein in RIPA buffer) was resolved on a 10% SDS PAGE gel and blots probed with the chimeric rabbit antibody (Cat # RAB01077) at 0.1 ug/mL before detection by an anti-rabbit secondary antibody. A primary incubation of 1h was used and protein was detected by chemiluminescence. The expected band size for TP53 is 43.7 kDa, though due to the high number of proline residues in this protein runs at a size of ~53kDa (c.f. Ziener et al., PMID: 7107651). Cat # RAB01077 successfully detected both human nuclear and cytoplasmic TP53.

Immunofluorescence

Immunofluorescence staining of fixed A431 with TP53 monoclonal antibody, clone PAb421 (Cat # RAB01077).

Immunofluorescence analysis of paraformaldehyde fixed A431 cells, permeabilized with 0.15% Triton and stained with the chimeric rabbit IgG antibody (Cat # RAB01077) at 10 ug/mL for 1h followed by Alexa Fluor® 488 secondary antibody (1 ug/mL), showing nuclear staining. The nuclear stain is DAPI (blue). Panels show from left-right, top-bottom Cat # RAB01077, DAPI, merged channels and a negative control. The negative control was stained with unimmunized rabbit IgG followed by Alexa Fluor® 488 secondary antibody.





Flow Cytometry

Flow-cytometry using TP53 monoclonal antibody, clone PAb421 (Cat # RAB01077).

Jurkat cells were stained with unimmunized rabbit IgG antibody (black line) or the rabbit-chimeric antibody (Cat # Ab00142, blue line) at a concentration of 10 ug/mL for 30 mins at RT. After washing, bound antibody was detected using anti-rabbit IgG JK (FITC-conjugate) antibody at 2 ug/mL and cells analyzed on a FACSCanto flow-cytometer.

Specification

Product Description	Rabbit recombinant monoclonal antibody raised against TP53.
Antibody Species	Rabbit
Immunogen	Originate antibody is raised against synthetic peptide corresponding to amino acids 371-380 of human TP53
Reactivity	Human
Specificity	This antibody reacts to the mammalian mutant and wild-type TP53 protein and reacts with an epitope between amino acid residues 370 and 378 (near the C-terminus of the protein), corresponding to the sequence "KKGQSTSRHK".
Form	Liquid
Purification	Protein A affinity purified
Isotype	Rabbit IgG, kappa
Recommend Usage	Flow Cytometry Immunofluorescence Western Blot The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (0.02% Proclin 300)
Storage Instruction	Store at 4°C. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.

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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

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](#)
- [Keratosis](#)
- [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](#)
- [Pancreatic Neoplasms](#)
- [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](#)