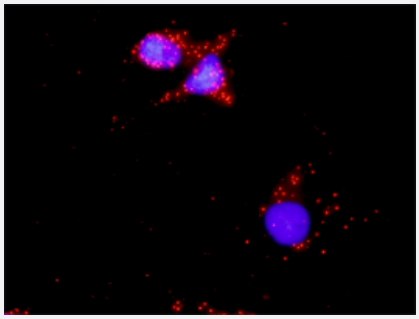
TP53 & LAMA4 Protein Protein Interaction Antibody Pair

Catalog # DI0561 Size 1 Set

Applications



Representative image of Proximity Ligation Assay of protein-protein interactions between TP53 and LAMA4. HeLa cells were stained with anti-TP53 rabbit purified polyclonal antibody 1:1200 and anti-LAMA4 mouse purified polyclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex. The images were analyzed using an optimized freeware (BlobFinder) download from The Centre for Image Analysis at Uppsala University.

Specification

Product Description	This protein protein interaction antibody pair set comes with two antibodies to detect the protein-protein interaction, one against the TP53 protein, and the other against the LAMA4 protein for use in *in situ* Proximity Ligation Assay. See Publication Reference below.
Reactivity	Human
Quality Control Testing	Protein protein interaction immunofluorescence result. Representative image of Proximity Ligation Assay of protein-protein interactions between TP53 and LAMA4. HeLa cells were stained with anti-TP53 rabbit purified polyclonal antibody 1:1200 and anti-LAMA4 mouse purified polyclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex. The images were analyzed using an optimized freeware (BlobFinder) download from The Centre for Image Analysis at Uppsala University.
Supplied Products	Antibody pair set content: 1. TP53 rabbit purified polyclonal antibody (100 ug) 2. LAMA4 mouse purified polyclonal antibody (40 ug) *Reagents are sufficient for at least 30-50 assays using recommended protocols.
Storage Instruction	Store reagents of the antibody pair set at -20°C or lower. Please aliquot to avoid repeated freeze thaw cycle. Reagents should be returned to -20°C storage immediately after use.

Applications

Copyright © 2023 Abnova Corporation. All Rights Reserved.

- *In situ* Proximity Ligation Assay (Cell)

Gene Info — LAMA4

Entrez GeneID	3910
Gene Name	LAMA4
Gene Alias	DKFZp686D23145, LAMA3, LAMA4*-1
Gene Description	laminin, alpha 4
Omim ID	600133
Gene Ontology	Hyperlink
Gene Summary	Laminins, a family of extracellular matrix glycoproteins, are the major noncollagenous constituent of basement membranes. They have been implicated in a wide variety of biological processes inc luding cell adhesion, differentiation, migration, signaling, neurite outgrowth and metastasis. Lamin ins are composed of 3 non identical chains: laminin alpha, beta and gamma (formerly A, B1, and B2, respectively) and they form a cruciform structure consisting of 3 short arms, each formed by a different chain, and a long arm composed of all 3 chains. Each laminin chain is a multidomain prot ein encoded by a distinct gene. Several isoforms of each chain have been described. Different al pha, beta and gamma chain isomers combine to give rise to different heterotrimeric laminin isofor ms which are designated by Arabic numerals in the order of their discovery, i.e. alpha1beta1gam ma1 heterotrimer is laminin 1. The biological functions of the different chains and trimer molecules are largely unknown, but some of the chains have been shown to differ with respect to their tissue distribution, presumably reflecting diverse functions in vivo. This gene encodes the alpha chain is oform laminin, alpha 4. The domain structure of alpha 4 is similar to that of alpha 3, both of which r esemble truncated versions of alpha 1 and alpha 2, in that approximately 1,200 residues at the N- terminus (domains IV, V and VI) have been lost. Laminin, alpha 4 contains the C-terminal G doma in which distinguishes all alpha chains from the beta and gamma chains. The RNA analysis from a dult and fetal tissues revealed developmental regulation of expression, however, the exact functio n of laminin, alpha 4 is not known. Tissue-specific utilization of alternative polyA-signal has been d escribed in literature. Alternative splicing results in multiple transcript variants encoding distinct is oforms. [provided by RefSeq
Other Designations	OTTHUMP00000017039|OTTHUMP00000017043|laminin alpha 4 chain

Gene Info — TP53

Entrez GeneID	7157
Gene Name	TP53

Copyright © 2023 Abnova Corporation. All Rights Reserved.

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
- ECM-receptor interaction
- Endometrial cancer
- Focal adhesion
- Glioma
- MAPK signaling pathway

Copyright © 2023 Abnova Corporation. All Rights Reserved.

- Melanoma
- Neurotrophin signaling pathway
- Non-small cell lung cancer
- p53 signaling pathway
- Pancreatic cancer
- Pathways in cancer
- Pathways in cancer
- Prostate cancer
- Small cell lung 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

Copyright © 2023 Abnova Corporation. All Rights Reserved.

- 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

Copyright © 2023 Abnova Corporation. All Rights Reserved.

- Cerebral Infarction
- Cervical Intraepithelial Neoplasia
- Chagas Disease
- Cholecystitis
- Choriocarcinoma
- Choroid Plexus Neoplasms
- Chromosomal Instability
- Chromosome Aberrations
- Chromosome Deletion
- Chronic Disease
- Cicatrix
- Cleft Lip
- Cleft Palate
- Cocarcinogenesis
- Cognition Disorders
- Colitis
- Colon cancer
- Colonic Neoplasms
- Colorectal Neoplasms
- Condylomata Acuminata
- Conjunctival Neoplasms
- Constriction
- Coronary Artery Disease
- Coronary Artery Disease
- Coronary Disease
- Coronary Restenosis

Copyright © 2023 Abnova Corporation. All Rights Reserved.

- 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

Copyright © 2023 Abnova Corporation. All Rights Reserved.

- Gastrointestinal Neoplasms
- Gastrointestinal Stromal Tumors
- Genetic Diseases
- Genetic Predisposition to Disease
- 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

Copyright © 2023 Abnova Corporation. All Rights Reserved.

- 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

Copyright © 2023 Abnova Corporation. All Rights Reserved.

- 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

Copyright © 2023 Abnova Corporation. All Rights Reserved.

- 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

Copyright © 2023 Abnova Corporation. All Rights Reserved.

- 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

Copyright © 2023 Abnova Corporation. All Rights Reserved.

- Tobacco Use Disorder
- Tongue Neoplasms
- Tooth Abnormalities
- 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

Copyright © 2023 Abnova Corporation. All Rights Reserved.