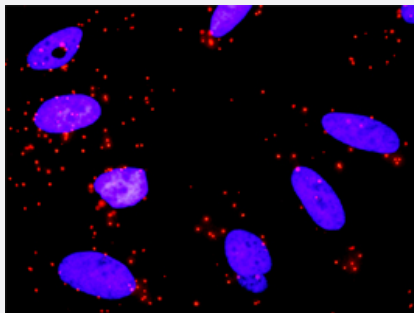


TP53 & HSPA1B Protein Protein Interaction Antibody Pair

Catalog # DI0230

Size 1 Set

Applications



Representative image of Proximity Ligation Assay of protein-protein interactions between TP53 and HSPA1B. HeLa cells were stained with anti-TP53 rabbit purified polyclonal antibody 1:1200 and anti-HSPA1B mouse monoclonal 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 HSPA1B 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 HSPA1B. HeLa cells were stained with anti-TP53 rabbit purified polyclonal antibody 1:1200 and anti-HSPA1B mouse monoclonal 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 Product

Antibody pair set content:
1. TP53 rabbit purified polyclonal antibody (100 ug)
2. HSPA1B mouse monoclonal 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

- *In situ* Proximity Ligation Assay (Cell)

Gene Info — HSPA1B

Entrez GeneID	3304
Gene Name	HSPA1B
Gene Alias	FLJ54328, HSP70-1B, HSP70-2, HSPA1A
Gene Description	heat shock 70kDa protein 1B
Omim ID	603012
Gene Ontology	Hyperlink
Gene Summary	This intronless gene encodes a 70kDa heat shock protein which is a member of the heat shock protein 70 family. In conjunction with other heat shock proteins, this protein stabilizes existing proteins against aggregation and mediates the folding of newly translated proteins in the cytosol and in organelles. It is also involved in the ubiquitin-proteasome pathway through interaction with the AU-rich element RNA-binding protein 1. The gene is located in the major histocompatibility complex class III region, in a cluster with two closely related genes which encode similar proteins. [provided by RefSeq]
Other Designations	OTTHUMP00000029288 heat shock 70kD protein 1B heat shock 70kDa protein 1A

Gene Info — TP53

Entrez GeneID	7157
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 \(ALS\)](#)
- [Antigen processing and presentation](#)
- [Apoptosis](#)
- [Basal cell carcinoma](#)
- [Bladder cancer](#)
- [Cell cycle](#)
- [Chronic myeloid leukemia](#)
- [Colorectal cancer](#)
- [Endocytosis](#)
- [Endometrial cancer](#)
- [Glioma](#)
- [MAPK signaling pathway](#)
- [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](#)
- [Abortion](#)
- [Acquired Hyperostosis Syndrome](#)
- [Acute Disease](#)
- [Acute Disease](#)
- [Adenocarcinoma](#)
- [Adenoma](#)
- [Adenomatous Polyposis Coli](#)
- [Adrenal Cortex Neoplasms](#)
- [Albuminuria](#)
- [Alcoholism](#)
- [Altitude Sickness](#)
- [Alzheimer disease](#)
- [Alzheimer disease](#)
- [Ameloblastoma](#)
- [Aneuploidy](#)
- [Anoxia](#)

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

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

- [Connective Tissue Diseases](#)
- [Constriction](#)
- [Constriction](#)
- [Coronary Artery Disease](#)
- [Coronary Artery Disease](#)
- [Coronary Disease](#)
- [Coronary Restenosis](#)
- [Craniocerebral Trauma](#)
- [Critical Illness](#)
- [Crohn Disease](#)
- [Crohn Disease](#)
- [Cross Infection](#)
- [Cystadenocarcinoma](#)
- [Delayed Graft Function](#)
- [Depressive Disorder](#)
- [Depressive Disorder](#)
- [Diabetes Mellitus](#)
- [Diabetes Mellitus](#)
- [Diabetic Foot](#)
- [Diabetic Nephropathies](#)
- [Diabetic Nephropathies](#)
- [Digestive System Neoplasms](#)
- [Disease Progression](#)
- [Disease Progression](#)
- [Disease Susceptibility](#)
- [DNA Damage](#)

- [Down Syndrome](#)
- [Duodenal Ulcer](#)
- [Duodenal Ulcer](#)
- [Edema](#)
- [Ehlers-Danlos Syndrome](#)
- [Endometrial Hyperplasia](#)
- [Endometrial Neoplasms](#)
- [Endometriosis](#)
- [Epidermodysplasia Verruciformis](#)
- [Epstein-Barr Virus Infections](#)
- [Esophageal Neoplasms](#)
- [Fallopian Tube Neoplasms](#)
- [Fetal Diseases](#)
- [Gallbladder Neoplasms](#)
- [Ganglioglioma](#)
- [Gastritis](#)
- [Gastroesophageal Reflux](#)
- [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](#)
- [Graves Disease](#)
- [Hashimoto Disease](#)
- [Head and Neck Neoplasms](#)
- [Helicobacter Infections](#)
- [Helicobacter Infections](#)
- [Hematologic Diseases](#)
- [Hepatitis B](#)
- [Hepatitis B](#)
- [Hepatitis C](#)
- [Hepatitis C](#)
- [Herpes Simplex](#)
- [HIV Infections](#)
- [Hodgkin Disease](#)
- [Hydatidiform Mole](#)
- [Hypertension](#)
- [Hypopharyngeal Neoplasms](#)
- [Hypotension](#)
- [Infection](#)
- [Infertility](#)
- [Inflammation](#)
- [Inflammation](#)
- [Inflammatory Bowel Diseases](#)
- [Intestinal Neoplasms](#)

- [Intracranial Thrombosis](#)
- [Keloid](#)
- [Keratoses](#)
- [Kidney Failure](#)
- [Kidney Failure](#)
- [Kidney Neoplasms](#)
- [Laryngeal Neoplasms](#)
- [Leber hereditary optic neuropathy](#)
- [Leiomyoma](#)
- [Leukemia](#)
- [Leukoplakia](#)
- [Lichen Planus](#)
- [Li-Fraumeni Syndrome](#)
- [Lissencephaly](#)
- [Liver Cirrhosis](#)
- [Liver Neoplasms](#)
- [Liver Neoplasms](#)
- [Low Tension Glaucoma](#)
- [Lung Neoplasms](#)
- [Lupus Erythematosus](#)
- [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 Organ Failure](#)
- [Multiple Sclerosis](#)
- [Multiple Sclerosis](#)
- [Multiple Trauma](#)
- [Musculoskeletal Diseases](#)
- [Myelodysplastic Syndromes](#)
- [Nasopharyngeal Neoplasms](#)
- [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](#)
- [Obesity](#)
- [Occupational Diseases](#)
- [Ocular Hypertension](#)
- [Oligodendroglioma](#)
- [Oligospermia](#)
- [Optic Atrophy](#)
- [Oral Submucous Fibrosis](#)
- [Oropharyngeal Neoplasms](#)
- [Osteoarthritis](#)
- [Osteoporosis](#)
- [Osteosarcoma](#)
- [Ovarian cancer](#)
- [Ovarian Neoplasms](#)
- [Pancreatic cancer](#)
- [Pancreatic Neoplasms](#)
- [Pancreatitis](#)
- [Papilloma](#)
- [Papillomavirus Infections](#)

- [Parkinson disease](#)
- [Pemphigus](#)
- [Penile Neoplasms](#)
- [Peptic Ulcer](#)
- [Peritoneal Neoplasms](#)
- [Pharyngeal Neoplasms](#)
- [Postoperative Complications](#)
- [Precancerous Conditions](#)
- [Precancerous Conditions](#)
- [Pre-Eclampsia](#)
- [Pregnancy Complications](#)
- [Premature Birth](#)
- [Prostate cancer](#)
- [Prostatic Hyperplasia](#)
- [Prostatic Intraepithelial Neoplasia](#)
- [Prostatic Neoplasms](#)
- [Psoriasis](#)
- [Psychiatric Status Rating Scales](#)
- [Pterygium](#)
- [Puerperal Disorders](#)
- [Pulmonary Disease](#)
- [Pulmonary Disease](#)
- [Pulmonary Edema](#)
- [Pulmonary Fibrosis](#)
- [Radiation Injuries](#)

- [Radiodermatitis](#)
- [Rectal Neoplasms](#)
- [Recurrence](#)
- [Recurrence](#)
- [Roseolovirus Infections](#)
- [Sarcoma](#)
- [Schizophrenia](#)
- [Schizophrenia](#)
- [Schizophrenic Psychology](#)
- [Sepsis](#)
- [Shock](#)
- [Skin Diseases](#)
- [Skin Diseases](#)
- [Skin Neoplasms](#)
- [Small Cell Lung Carcinoma](#)
- [Spinal Dysraphism](#)
- [Spondylarthropathies](#)
- [Stomach Neoplasms](#)
- [Stomach Neoplasms](#)
- [Stomach Ulcer](#)
- [Streptococcal Infections](#)
- [Stroke](#)
- [Subarachnoid Hemorrhage](#)
- [Substance-Related Disorders](#)
- [Sunburn](#)
- [Systemic Inflammatory Response Syndrome](#)

- [The p53 tumor suppressor protein](#)
- [Thyroid Diseases](#)
- [Thyroid Neoplasms](#)
- [Thyroiditis](#)
- [Thyroiditis](#)
- [Tobacco Use Disorder](#)
- [Tongue Neoplasms](#)
- [Tumor Virus Infections](#)
- [Uremia](#)
- [Urinary Bladder Neoplasms](#)
- [Urinary Tract Infections](#)
- [Urologic Diseases](#)
- [Uterine Cervical Diseases](#)
- [Uterine Cervical Dysplasia](#)
- [Uterine Cervical Neoplasms](#)
- [Uterine Neoplasms](#)
- [Ventricular Dysfunction](#)
- [Waldenstrom Macroglobulinemia](#)
- [Wegener Granulomatosis](#)
- [Werner syndrome](#)