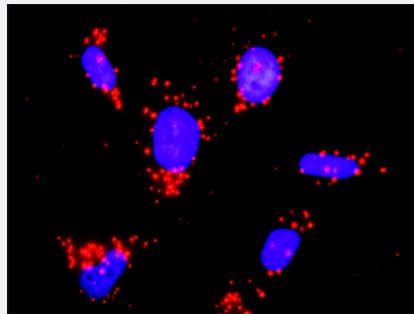


# TP53 & HDAC1 Protein Protein Interaction Antibody Pair

Catalog # DI0364 Size 1 Set

## Applications



Representative image of Proximity Ligation Assay of protein-protein interactions between TP53 and HDAC1. HeLa cells were stained with anti-TP53 rabbit purified polyclonal antibody 1:1200 and anti-HDAC1 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

<b>Product Description</b>	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 HDAC1 protein for use in <a href="#">in situ Proximity Ligation Assay</a> . <a href="#">See Publication Reference below</a> .
<b>Reactivity</b>	Human
<b>Quality Control Testing</b>	Protein protein interaction immunofluorescence result. Representative image of Proximity Ligation Assay of protein-protein interactions between TP53 and HDAC1. HeLa cells were stained with anti-TP53 rabbit purified polyclonal antibody 1:1200 and anti-HDAC1 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.
<b>Supplied Product</b>	Antibody pair set content: 1. TP53 rabbit purified polyclonal antibody (100 ug) 2. HDAC1 mouse monoclonal antibody (40 ug) *Reagents are sufficient for at least 30-50 assays using recommended protocols.
<b>Storage Instruction</b>	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 — HDAC1

Entrez GenelID	<a href="#">3065</a>
Gene Name	HDAC1
Gene Alias	DKFZp686H12203, GON-10, HD1, RPD3, RPD3L1
Gene Description	histone deacetylase 1
Omim ID	<a href="#">601241</a>
Gene Ontology	<a href="#">Hyperlink</a>
Gene Summary	Histone acetylation and deacetylation, catalyzed by multisubunit complexes, play a key role in the regulation of eukaryotic gene expression. The protein encoded by this gene belongs to the histone deacetylase/acuc/apha family and is a component of the histone deacetylase complex. It also interacts with retinoblastoma tumor-suppressor protein and this complex is a key element in the control of cell proliferation and differentiation. Together with metastasis-associated protein-2, it deacetylates p53 and modulates its effect on cell growth and apoptosis. [provided by RefSeq]
Other Designations	OTTHUOMP00000008745 reduced potassium dependency, yeast homolog-like 1

## Gene Info — TP53

Entrez GenelID	<a href="#">7157</a>
Gene Name	TP53
Gene Alias	FLJ92943, LFS1, TRP53, p53
Gene Description	tumor protein p53
Omim ID	<a href="#">114480</a> <a href="#">114500</a> <a href="#">114550</a> <a href="#">151623</a> <a href="#">161550</a> <a href="#">191170</a> <a href="#">202300</a> <a href="#">260350</a>
Gene Ontology	<a href="#">Hyperlink</a>

**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](#)
- [Cell cycle](#)
- [Chronic myeloid leukemia](#)
- [Chronic myeloid leukemia](#)
- [Colorectal cancer](#)
- [Endometrial cancer](#)
- [Glioma](#)
- [MAPK signaling pathway](#)
- [Melanoma](#)
- [Neurotrophin signaling pathway](#)
- [Non-small cell lung cancer](#)
- [Notch signaling pathway](#)

- [p53 signaling pathway](#)
- [Pancreatic cancer](#)
- [Pathways in 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](#)

- [Asthma](#)
- [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](#)
- [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](#)
- [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](#)
- [Huntington 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](#)

- [Mental Status Schedule](#)
- [Metaplasia](#)
- [Microsatellite Instability](#)
- [Mouth Neoplasms](#)
- [Multiple Myeloma](#)
- [Multiple Sclerosis](#)
- [Myelodysplastic Syndromes](#)
- [Nasopharyngeal Neoplasms](#)
- [Neoplasm Invasiveness](#)
- [Neoplasm Metastasis](#)
- [Neoplasm Recurrence](#)
- [Neoplasms](#)
- [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 cancer](#)
- [Ovarian Neoplasms](#)
- [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](#)
- [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](#)