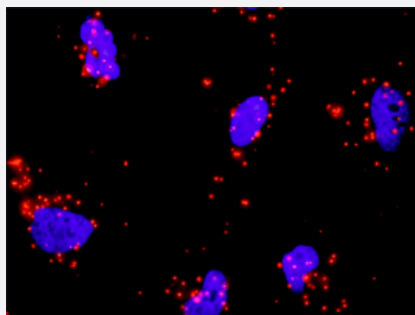


CDKN1A & HDAC1 Protein Protein Interaction Antibody Pair

Catalog # DI0414

Size 1 Set

Applications



Representative image of Proximity Ligation Assay of protein-protein interactions between CDKN1A and HDAC1. HeLa cells were stained with anti-CDKN1A 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

Product Description

This protein protein interaction antibody pair set comes with two antibodies to detect the protein-protein interaction, one against the CDKN1A protein, and the other against the HDAC1 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 CDKN1A and HDAC1. HeLa cells were stained with anti-CDKN1A 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.

Supplied Product

Antibody pair set content:
1. CDKN1A 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.

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 — CDKN1A

Entrez GeneID [1026](#)

Gene Name CDKN1A

Gene Alias CAP20, CDKN1, CIP1, MDA-6, P21, SDI1, WAF1, p21CIP1

Gene Description cyclin-dependent kinase inhibitor 1A (p21, Cip1)

Omim ID [116899](#)

Gene Ontology [Hyperlink](#)

Gene Summary This gene encodes a potent cyclin-dependent kinase inhibitor. The encoded protein binds to and inhibits the activity of cyclin-CDK2 or -CDK4 complexes, and thus functions as a regulator of cell cycle progression at G1. The expression of this gene is tightly controlled by the tumor suppressor protein p53, through which this protein mediates the p53-dependent cell cycle G1 phase arrest in response to a variety of stress stimuli. This protein can interact with proliferating cell nuclear antigen (PCNA), a DNA polymerase accessory factor, and plays a regulatory role in S phase DNA replication and DNA damage repair. This protein was reported to be specifically cleaved by CASP3-like caspases, which thus leads to a dramatic activation of CDK2, and may be instrumental in the execution of apoptosis following caspase activation. Two alternatively spliced variants, which encode an identical protein, have been reported. [provided by RefSeq]

Other Designations CDK-interaction protein 1|DNA synthesis inhibitor|OTTHUMP00000016298|cyclin-dependent kinase inhibitor 1A|melanoma differentiation associated protein 6|wild-type p53-activated fragment 1

Gene Info — HDAC1

Entrez GeneID [3065](#)

Gene Name HDAC1

Gene Alias DKFZp686H12203, GON-10, HD1, RPD3, RPD3L1

Gene Description histone deacetylase 1

Omim ID [601241](#)

Gene Ontology [Hyperlink](#)

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

OTTHUMP00000008745|reduced potassium dependency, yeast homolog-like 1

Pathway

- [Bladder cancer](#)
- [Cell cycle](#)
- [Cell cycle](#)
- [Chronic myeloid leukemia](#)
- [Chronic myeloid leukemia](#)
- [ErbB signaling pathway](#)
- [Glioma](#)
- [Melanoma](#)
- [Notch signaling pathway](#)
- [p53 signaling pathway](#)
- [Pathways in cancer](#)
- [Pathways in cancer](#)
- [Prostate cancer](#)

Disease

- [Adenocarcinoma](#)
- [Asthma](#)
- [Ataxia telangiectasia](#)
- [Atherosclerosis](#)

- [Brain Neoplasms](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Carcinoma](#)
- [Cardiovascular Diseases](#)
- [Chromosome Aberrations](#)
- [Chronic Disease](#)
- [Cognition Disorders](#)
- [Colorectal Neoplasms](#)
- [Diabetes Mellitus](#)
- [Disease Progression](#)
- [DNA Damage](#)
- [Edema](#)
- [Esophageal Neoplasms](#)
- [Genetic Predisposition to Disease](#)
- [Genetic Predisposition to Disease](#)
- [Glaucoma](#)
- [Glioma](#)
- [Head and Neck Neoplasms](#)
- [Helicobacter Infections](#)
- [Huntington disease](#)
- [Intestinal Neoplasms](#)
- [Kidney Failure](#)
- [Laryngeal Neoplasms](#)
- [Leiomyoma](#)
- [Leukemia](#)

- [Low Tension Glaucoma](#)
- [Lung Neoplasms](#)
- [Lupus Erythematosus](#)
- [Lupus Nephritis](#)
- [Lymphoma](#)
- [Malignant melanoma](#)
- [Melanoma](#)
- [Meningioma](#)
- [Mental Status Schedule](#)
- [Mouth Neoplasms](#)
- [Multiple endocrine neoplasia](#)
- [Multiple Endocrine Neoplasia Type 1](#)
- [Myocardial Infarction](#)
- [Nasopharyngeal Neoplasms](#)
- [Neoplasm Invasiveness](#)
- [Neoplasm Recurrence](#)
- [Neoplasms](#)
- [Neoplasms](#)
- [Neuroma](#)
- [Occupational Diseases](#)
- [Ocular Hypertension](#)
- [Ovarian cancer](#)
- [Ovarian cancer](#)
- [Ovarian Neoplasms](#)
- [Ovarian Neoplasms](#)
- [Pancreatic cancer](#)

- [Pancreatic Neoplasms](#)
- [Papillomavirus Infections](#)
- [Pharyngeal Neoplasms](#)
- [Precancerous Conditions](#)
- [Prostate cancer](#)
- [Prostatic Hyperplasia](#)
- [Prostatic Neoplasms](#)
- [Pulmonary Disease](#)
- [Radiation Injuries](#)
- [Skin Diseases](#)
- [Skin Neoplasms](#)
- [Stomach Neoplasms](#)
- [Tobacco Use Disorder](#)
- [Urinary Bladder Neoplasms](#)
- [Uterine Cervical Neoplasms](#)
- [Uterine Neoplasms](#)