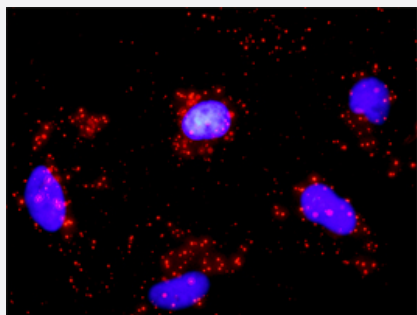


CDK4 & CDKN1B Protein Protein Interaction Antibody Pair

Catalog # DI0295

Size 1 Set

Applications



Representative image of Proximity Ligation Assay of protein-protein interactions between CDK4 and CDKN1B. HeLa cells were stained with anti-CDK4 rabbit purified polyclonal antibody 1:1200 and anti-CDKN1B 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 CDK4 protein, and the other against the CDKN1B 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 CDK4 and CDKN1B. HeLa cells were stained with anti-CDK4 rabbit purified polyclonal antibody 1:1200 and anti-CDKN1B 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. CDK4 rabbit purified polyclonal antibody (100 ug)
2. CDKN1B 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 — CDK4

Entrez GeneID [1019](#)

Gene Name CDK4

Gene Alias CMM3, MGC14458, PSK-J3

Gene Description cyclin-dependent kinase 4

Omim ID [123829 609048](#)

Gene Ontology [Hyperlink](#)

Gene Summary

The protein encoded by this gene is a member of the Ser/Thr protein kinase family. This protein is highly similar to the gene products of *S. cerevisiae* cdc28 and *S. pombe* cdc2. It is a catalytic subunit of the protein kinase complex that is important for cell cycle G1 phase progression. The activity of this kinase is restricted to the G1-S phase, which is controlled by the regulatory subunits D-type cyclins and CDK inhibitor p16(INK4a). This kinase was shown to be responsible for the phosphorylation of retinoblastoma gene product (Rb). Mutations in this gene as well as in its related proteins including D-type cyclins, p16(INK4a) and Rb were all found to be associated with tumorigenesis of a variety of cancers. Multiple polyadenylation sites of this gene have been reported. [provided by RefSeq]

Other Designations cell division kinase 4|melanoma cutaneous malignant, 3

Gene Info — CDKN1B

Entrez GeneID [1027](#)

Gene Name CDKN1B

Gene Alias CDKN4, KIP1, MEN1B, MEN4, P27KIP1

Gene Description cyclin-dependent kinase inhibitor 1B (p27, Kip1)

Omim ID [600778 610755](#)

Gene Ontology [Hyperlink](#)

Gene Summary

This gene encodes a cyclin-dependent kinase inhibitor, which shares a limited similarity with CDK inhibitor CDKN1A/p21. The encoded protein binds to and prevents the activation of cyclin E-CDK2 or cyclin D-CDK4 complexes, and thus controls the cell cycle progression at G1. The degradation of this protein, which is triggered by its CDK dependent phosphorylation and subsequent ubiquitination by SCF complexes, is required for the cellular transition from quiescence to the proliferative state. [provided by RefSeq]

Other Designations

cyclin-dependent kinase inhibitor 1B

Pathway

- [Bladder cancer](#)
- [Cell cycle](#)
- [Cell cycle](#)
- [Chronic myeloid leukemia](#)
- [Chronic myeloid leukemia](#)
- [ErbB signaling pathway](#)
- [Glioma](#)
- [Melanoma](#)
- [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](#)
- [T cell receptor signaling pathway](#)
- [Tight junction](#)

Disease

- [Acromegaly](#)
- [Adenocarcinoma](#)
- [Adenocarcinoma](#)
- [Alzheimer disease](#)
- [Ataxia telangiectasia](#)
- [Atherosclerosis](#)
- [Birth Weight](#)
- [Brain Neoplasms](#)
- [Breast cancer](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Breast Neoplasms](#)
- [Carcinoma](#)
- [Cardiovascular Diseases](#)
- [Cardiovascular Diseases](#)
- [Chromosome Aberrations](#)
- [Cognition](#)
- [Colon cancer](#)
- [Colorectal Neoplasms](#)
- [Coronary Artery Disease](#)
- [Coronary Restenosis](#)
- [Diabetes Mellitus](#)
- [Diabetes Mellitus](#)
- [Disease Progression](#)

- [Edema](#)
- [Edema](#)
- [Endometriosis](#)
- [Esophageal Neoplasms](#)
- [Esophageal Neoplasms](#)
- [Genetic Predisposition to Disease](#)
- [Genetic Predisposition to Disease](#)
- [Glioblastoma](#)
- [Graft Occlusion](#)
- [Head and Neck Neoplasms](#)
- [Head and Neck Neoplasms](#)
- [Hyperparathyroidism](#)
- [Kidney Failure](#)
- [Kidney Failure](#)
- [Leukemia](#)
- [Leukemia](#)
- [Liver Neoplasms](#)
- [Lung Neoplasms](#)
- [Lung Neoplasms](#)
- [Lymphatic Metastasis](#)
- [Lymphoma](#)
- [Lymphoma](#)
- [Malignant melanoma](#)
- [Melanoma](#)
- [Mouth Neoplasms](#)
- [Mouth Neoplasms](#)

- [Multiple endocrine neoplasia](#)
- [Multiple Endocrine Neoplasia Type 1](#)
- [Myocardial Infarction](#)
- [Neoplasm Invasiveness](#)
- [Neoplasm Invasiveness](#)
- [Neoplasm Metastasis](#)
- [Neoplasm Recurrence](#)
- [Neoplasm Recurrence](#)
- [Neoplasms](#)
- [Neoplasms](#)
- [Obesity](#)
- [Ovarian cancer](#)
- [Ovarian cancer](#)
- [Ovarian Neoplasms](#)
- [Ovarian Neoplasms](#)
- [Pancreatic cancer](#)
- [Pancreatic cancer](#)
- [Pancreatic Neoplasms](#)
- [Pancreatic Neoplasms](#)
- [Parathyroid Neoplasms](#)
- [Precancerous Conditions](#)
- [Precancerous Conditions](#)
- [Primary Ovarian Insufficiency](#)
- [Prostate cancer](#)
- [Prostatic Neoplasms](#)
- [Pulmonary Disease](#)

- [Pulmonary Disease](#)
- [Retinoblastoma](#)
- [Skin Neoplasms](#)
- [Stomach Neoplasms](#)
- [Thyroid Neoplasms](#)
- [Urinary Bladder Neoplasms](#)
- [Urinary Bladder Neoplasms](#)
- [Uveal Neoplasms](#)
- [Werner syndrome](#)
- [Werner syndrome](#)