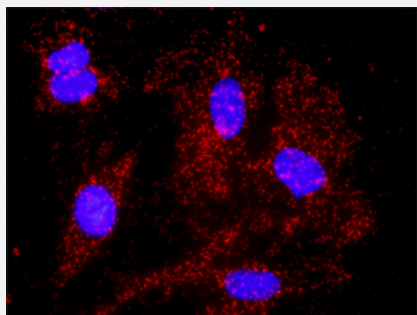


CDK2 & CDKN1B Protein Protein Interaction Antibody Pair

Catalog # DI0272

Size 1 Set

Applications



Representative image of Proximity Ligation Assay of protein-protein interactions between CDK2 and CDKN1B. HeLa cells were stained with anti-CDK2 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 CDK2 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 CDK2 and CDKN1B. HeLa cells were stained with anti-CDK2 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. CDK2 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 — CDK2

Entrez GeneID [1017](#)

Gene Name CDK2

Gene Alias p33(CDK2)

Gene Description cyclin-dependent kinase 2

Omim ID [116953](#)

Gene Ontology [Hyperlink](#)

Gene Summary

The protein encoded by this gene is a member of the Ser/Thr protein kinase family. This protein kinase is highly similar to the gene products of *S. cerevisiae* cdc28, and *S. pombe* cdc2. It is a catalytic subunit of the cyclin-dependent protein kinase complex, whose activity is restricted to the G1-S phase, and essential for cell cycle G1/S phase transition. This protein associates with and regulated by the regulatory subunits of the complex including cyclin A or E, CDK inhibitor p21Cip1 (CDKN1A) and p27Kip1 (CDKN1B). Its activity is also regulated by its protein phosphorylation. Two alternatively spliced variants and multiple transcription initiation sites of this gene have been reported. [provided by RefSeq]

Other Designations cdc2-related protein kinase|cell division kinase 2|p33 protein kinase

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

- [Cell cycle](#)
- [Cell cycle](#)
- [Chronic myeloid leukemia](#)
- [ErbB signaling pathway](#)
- [p53 signaling pathway](#)
- [Pathways in cancer](#)
- [Pathways in cancer](#)
- [Prostate cancer](#)
- [Prostate cancer](#)
- [Small cell lung cancer](#)
- [Small cell lung cancer](#)

Disease

- [Acromegaly](#)
- [Adenocarcinoma](#)
- [Alzheimer disease](#)
- [Ataxia telangiectasia](#)
- [Atherosclerosis](#)
- [Azoospermia](#)

- [Breast cancer](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Breast Neoplasms](#)
- [Carcinoma](#)
- [Cardiovascular Diseases](#)
- [Chromosome Aberrations](#)
- [Chromosome Aberrations](#)
- [Cognition](#)
- [Colon cancer](#)
- [Colorectal Neoplasms](#)
- [Coronary Artery Disease](#)
- [Coronary Restenosis](#)
- [Diabetes Mellitus](#)
- [Diabetes Mellitus](#)
- [Disease Progression](#)
- [Edema](#)
- [Endometriosis](#)
- [Esophageal Neoplasms](#)
- [Genetic Predisposition to Disease](#)
- [Genetic Predisposition to Disease](#)
- [Graft Occlusion](#)
- [Head and Neck Neoplasms](#)
- [Hyperparathyroidism](#)
- [Kidney Failure](#)
- [Kidney Failure](#)

- [Leukemia](#)
- [Liver Neoplasms](#)
- [Lung Neoplasms](#)
- [Lymphatic Metastasis](#)
- [Lymphoma](#)
- [Lymphoma](#)
- [Mouth Neoplasms](#)
- [Multiple endocrine neoplasia](#)
- [Multiple Endocrine Neoplasia Type 1](#)
- [Myocardial Infarction](#)
- [Neoplasm Invasiveness](#)
- [Neoplasm Invasiveness](#)
- [Neoplasm Metastasis](#)
- [Neoplasm Recurrence](#)
- [Neoplasms](#)
- [Ovarian cancer](#)
- [Ovarian cancer](#)
- [Ovarian Neoplasms](#)
- [Ovarian Neoplasms](#)
- [Pancreatic cancer](#)
- [Pancreatic Neoplasms](#)
- [Parathyroid Neoplasms](#)
- [Precancerous Conditions](#)
- [Primary Ovarian Insufficiency](#)
- [Prostate cancer](#)
- [Prostatic Neoplasms](#)

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