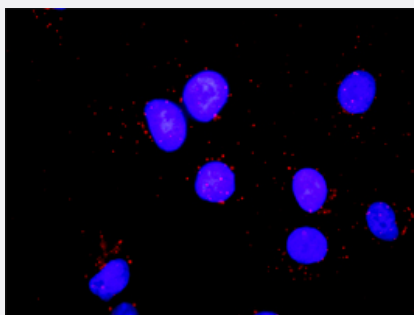


CDK2 & PCNA Protein Protein Interaction Antibody Pair

Catalog # DI0028

Size 1 Set

Applications



Representative image of Proximity Ligation Assay of protein-protein interactions between CDK2 and PCNA. Mahlavu cells were stained with anti-CDK2 rabbit purified polyclonal antibody 1:1200 and anti-PCNA 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 PCNA 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 PCNA. Mahlavu cells were stained with anti-CDK2 rabbit purified polyclonal antibody 1:1200 and anti-PCNA 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. PCNA 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 — PCNA

Entrez GeneID [5111](#)

Gene Name PCNA

Gene Alias MGC8367

Gene Description proliferating cell nuclear antigen

Omim ID [176740](#)

Gene Ontology [Hyperlink](#)

Gene Summary The protein encoded by this gene is found in the nucleus and is a cofactor of DNA polymerase delta. The encoded protein acts as a homotrimer and helps increase the processivity of leading strand synthesis during DNA replication. In response to DNA damage, this protein is ubiquitinated and is involved in the RAD6-dependent DNA repair pathway. Two transcript variants encoding the same protein have been found for this gene. Pseudogenes of this gene have been described on chromosome 4 and on the X chromosome. [provided by RefSeq]

Other Designations

DNA polymerase delta auxiliary protein|OTTHUMP00000030189|OTTHUMP00000030190|cyclin

Pathway

- [Base excision repair](#)
- [Cell cycle](#)
- [Cell cycle](#)
- [DNA replication](#)
- [Mismatch repair](#)
- [Nucleotide excision repair](#)
- [p53 signaling pathway](#)
- [Pathways in cancer](#)
- [Prostate cancer](#)
- [Small cell lung cancer](#)

Disease

- [Adenocarcinoma](#)
- [Ataxia telangiectasia](#)
- [Azoospermia](#)
- [Brain Neoplasms](#)
- [Breast cancer](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)

- [Breast Neoplasms](#)
- [Carcinoma](#)
- [Chromosome Aberrations](#)
- [Colorectal Neoplasms](#)
- [Diabetes Mellitus](#)
- [Disease Progression](#)
- [DNA Damage](#)
- [Esophageal Neoplasms](#)
- [Genetic Predisposition to Disease](#)
- [Genetic Predisposition to Disease](#)
- [Glioma](#)
- [Graft vs Host Disease](#)
- [Head and Neck Neoplasms](#)
- [Kidney Failure](#)
- [Kidney Failure](#)
- [Laryngeal Neoplasms](#)
- [Lung Neoplasms](#)
- [Lymphoma](#)
- [Meningeal Neoplasms](#)
- [Meningioma](#)
- [Mouth Neoplasms](#)
- [Multiple Sclerosis](#)
- [Neoplasm Invasiveness](#)
- [Neuroma](#)
- [Ovarian cancer](#)
- [Ovarian Neoplasms](#)

- [Ovarian Neoplasms](#)
- [Papillomavirus Infections](#)
- [Pharyngeal Neoplasms](#)
- [Pulmonary Disease](#)
- [Urinary Bladder Neoplasms](#)
- [Uterine Cervical Neoplasms](#)
- [Werner syndrome](#)