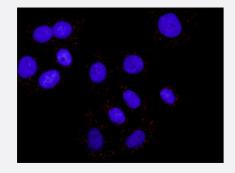


CCNB1 & CDKN1A Protein Protein Interaction Antibody Pair

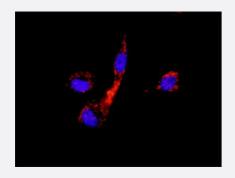
Catalog # DI0089 Size 1 Set

Applications



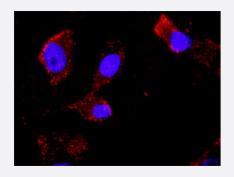
In situ Proximity Ligation Assay (Cell)

Representative image of Proximity Ligation Assay of protein-protein interactions between CCNB1 and CDKN1A. HT-29 cells were stained with anti-CCNB1 rabbit purified polyclonal antibody 1:100 and anti-CDKN1A mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex, and nuclei were counterstained with DAPI (blue).



In situ Proximity Ligation Assay (Cell)

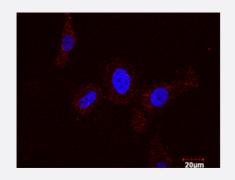
Representative image of Proximity Ligation Assay of protein-protein interactions between CCNB1 and CDKN1A. A-549 cells were stained with anti-CCNB1 rabbit purified polyclonal antibody 1:100 and anti-CDKN1A mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex, and nuclei were counterstained with DAPI (blue).



In situ Proximity Ligation Assay (Cell)

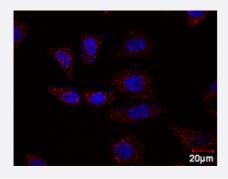
Representative image of Proximity Ligation Assay of protein-protein interactions between CCNB1 and CDKN1A. PC-3 cells were stained with anti-CCNB1 rabbit purified polyclonal antibody 1:100 and anti-CDKN1A mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex, and nuclei were counterstained with DAPI (blue).





In situ Proximity Ligation Assay (Cell)

Confocal microscopy image of Proximity Ligation Assay of protein-protein interactions between CCNB1 and CDKN1A. PC-3 cells were stained with anti-CCNB1 rabbit purified polyclonal antibody 1:100 and anti-CDKN1A mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex, and nuclei were counterstained with DAPI (blue).



Representative image of Proximity Ligation Analysis of protein-protein interactions between CCNB1 and CDKN1A. HeLa cells were stained with anti-CCNB1 rabbit purified polyclonal antibody 1:100 and anti-CDKN1A 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-prot ein interaction, one against the CCNB1 protein, and the other against the CDKN1A protein for use in <i>in situ</i> Proximity Ligation Assay. See Publication Reference below.
Reactivity	Human
Quality Control Testing	Protein protein interaction immunofluorescence result. Representative image of Proximity Ligation Analysis of protein-protein interactions between CCNB1 and CDKN1A. HeLa cells were stained with anti-CCNB1 rabbit purified polyclonal antibody 1:100 and anti-CDKN1A 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) do wnload from The Centre for Image Analysis at Uppsala University.
Supplied Product	Antibody pair set content: 1. CCNB1 rabbit purified polyclonal antibody (100 ug) 2. CDKN1A 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 tha w cycle. Reagents should be returned to -20°C storage immediately after use.

Applications



In situ Proximity Ligation Assay (Cell)

Representative image of Proximity Ligation Assay of protein-protein interactions between CCNB1 and CDKN1A. HT-29 cells were stained with anti-CCNB1 rabbit purified polyclonal antibody 1:100 and anti-CDKN1A mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex, and nuclei were counterstained with DAPI (blue).

In situ Proximity Ligation Assay (Cell)

Representative image of Proximity Ligation Assay of protein-protein interactions between CCNB1 and CDKN1A. A-549 cells were stained with anti-CCNB1 rabbit purified polyclonal antibody 1:100 and anti-CDKN1A mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex, and nuclei were counterstained with DAPI (blue).

In situ Proximity Ligation Assay (Cell)

Representative image of Proximity Ligation Assay of protein-protein interactions between CCNB1 and CDKN1A. PC-3 cells were stained with anti-CCNB1 rabbit purified polyclonal antibody 1:100 and anti-CDKN1A mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex, and nuclei were counterstained with DAPI (blue).

In situ Proximity Ligation Assay (Cell)

Confocal microscopy image of Proximity Ligation Assay of protein-protein interactions between CCNB1 and CDKN1A. PC-3 cells were stained with anti-CCNB1 rabbit purified polyclonal antibody 1:100 and anti-CDKN1A mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex, and nuclei were counterstained with DAPI (blue).

Gene Info — CCNB1	
Entrez GenelD	<u>891</u>
Gene Name	CCNB1
Gene Alias	CCNB
Gene Description	cyclin B1
Omim ID	123836
Gene Ontology	<u>Hyperlink</u>
Gene Summary	The protein encoded by this gene is a regulatory protein involved in mitosis. The gene product co mplexes with p34(cdc2) to form the maturation-promoting factor (MPF). Two alternative transcript s have been found, a constitutively expressed transcript and a cell cycle-regulated transcript, that i s expressed predominantly during G2/M phase. The different transcripts result from the use of alternate transcription initiation sites. [provided by RefSeq
Other Designations	G2/mitotic-specific cyclin B1



Gene Info — CDKN1A	
<u>1026</u>	
CDKN1A	
CAP20, CDKN1, CIP1, MDA-6, P21, SDI1, WAF1, p21CIP1	
cyclin-dependent kinase inhibitor 1A (p21, Cip1)	
<u>116899</u>	
<u>Hyperlink</u>	
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	
CDK-interaction protein 1 DNA synthesis inhibitor OTTHUMP0000016298 cyclin-dependent kin ase inhibitor 1A melanoma differentiation associated protein 6 wild-type p53-activated fragment 1	

Pathway

- Bladder cancer
- Cell cycle
- Cell cycle
- Chronic myeloid leukemia
- ErbB signaling pathway
- Glioma
- Melanoma
- p53 signaling pathway
- p53 signaling pathway
- Pathways in cancer



Prostate cancer

Disease

- Adenocarcinoma
- Adenocarcinoma
- Ataxia telangiectasia
- Atherosclerosis
- Brain Neoplasms
- Breast cancer
- Breast Neoplasms
- Carcinoma
- Cardiovascular Diseases
- Chromosome Aberrations
- Chronic Disease
- Colorectal Neoplasms
- Diabetes Mellitus
- <u>Disease Progression</u>
- DNA Damage
- Edema
- Esophageal Neoplasms
- Esophageal Neoplasms
- Genetic Predisposition to Disease
- Genetic Predisposition to Disease
- Glaucoma
- Glioma
- Head and Neck Neoplasms



- Helicobacter Infections
- Intestinal Neoplasms
- Kidney Failure
- Laryngeal Neoplasms
- Leiomyoma
- Leukemia
- Low Tension Glaucoma
- Lung Neoplasms
- Lupus Erythematosus
- Lupus Nephritis
- Lymphoma
- Malignant melanoma
- Melanoma
- Meningioma
- Mouth Neoplasms
- Multiple endocrine neoplasia
- Multiple Endocrine Neoplasia Type 1
- Myocardial Infarction
- Nasopharyngeal Neoplasms
- Neoplasm Invasiveness
- Neoplasm Recurrence
- Neoplasms
- Neuroma
- Occupational Diseases
- Ocular Hypertension



- 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
- Urinary Bladder Neoplasms
- <u>Uterine Cervical Neoplasms</u>
- Uterine Neoplasms