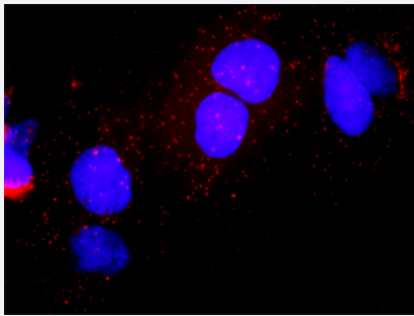


CDK7 & E2F1 Protein Protein Interaction Antibody Pair

Catalog # DI0016

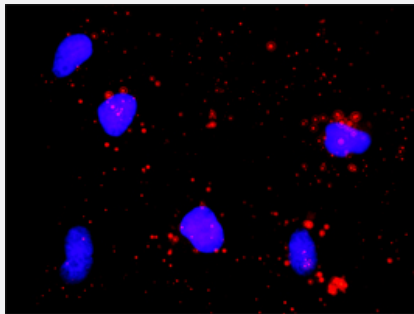
Size 1 Set

Applications



In situ Proximity Ligation Assay (Cell)

Representative image of Proximity Ligation Assay of protein-protein interactions between CDK7 and E2F1. Huh7 cells were stained with anti-CDK7 rabbit purified polyclonal antibody 1:1200 and anti-E2F1 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 Assay of protein-protein interactions between CDK7 and E2F1. HeLa cells were stained with anti-CDK7 rabbit purified polyclonal antibody 1:1200 and anti-E2F1 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 CDK7 protein, and the other against the E2F1 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 CDK7 and E2F1. HeLa cells were stained with anti-CDK7 rabbit purified polyclonal antibody 1:1200 and anti-E2F1 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. CDK7 rabbit purified polyclonal antibody (100 ug)
2. E2F1 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)

Representative image of Proximity Ligation Assay of protein-protein interactions between CDK7 and E2F1. Huh7 cells were stained with anti-CDK7 rabbit purified polyclonal antibody 1:1200 and anti-E2F1 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 — CDK7

Entrez GeneID[1022](#)**Gene Name**

CDK7

Gene Alias

CAK1, CDKN7, MO15, STK1, p39MO15

Gene Description

cyclin-dependent kinase 7

Omim ID[601955](#)**Gene Ontology**[Hyperlink](#)**Gene Summary**

The protein encoded by this gene is a member of the cyclin-dependent protein kinase (CDK) family. CDK family members are highly similar to the gene products of *Saccharomyces cerevisiae* cdc28, and *Schizosaccharomyces pombe* cdc2, and are known to be important regulators of cell cycle progression. This protein forms a trimeric complex with cyclin H and MAT1, which functions as a Cdk-activating kinase (CAK). It is an essential component of the transcription factor TFIIH, that is involved in transcription initiation and DNA repair. This protein is thought to serve as a direct link between the regulation of transcription and the cell cycle. [provided by RefSeq]

Other Designations

39 KDa protein kinase|Cdk-activating kinase|cell division protein kinase 7|cyclin-dependent kinase 7 (MO15 homolog, *Xenopus laevis*, cdk-activating kinase)|homolog of *Xenopus* MO15 Cdk-activating kinase|kinase subunit of CAK|serine/threonine kinase stk1|ser

Gene Info — E2F1

Entrez GeneID[1869](#)

Gene Name	E2F1
Gene Alias	E2F-1, RBAP1, RBBP3, RBP3
Gene Description	E2F transcription factor 1
Omim ID	189971
Gene Ontology	Hyperlink
Gene Summary	<p>The protein encoded by this gene is a member of the E2F family of transcription factors. The E2F family plays a crucial role in the control of cell cycle and action of tumor suppressor proteins and is also a target of the transforming proteins of small DNA tumor viruses. The E2F proteins contain several evolutionally conserved domains found in most members of the family. These domains include a DNA binding domain, a dimerization domain which determines interaction with the differentially regulated transcription factor proteins (DP), a transactivation domain enriched in acidic amino acids, and a tumor suppressor protein association domain which is embedded within the transactivation domain. This protein and another 2 members, E2F2 and E2F3, have an additional cyclin binding domain. This protein binds preferentially to retinoblastoma protein pRB in a cell-cycle dependent manner. It can mediate both cell proliferation and p53-dependent/independent apoptosis. [provided by RefSeq]</p>
Other Designations	OTTHUMP00000030661 retinoblastoma-associated protein 1

Pathway

- [Bladder cancer](#)
- [Cell cycle](#)
- [Cell cycle](#)
- [Chronic myeloid leukemia](#)
- [Glioma](#)
- [Melanoma](#)
- [Non-small cell lung cancer](#)
- [Nucleotide excision repair](#)
- [Pancreatic cancer](#)
- [Pathways in cancer](#)
- [Prostate cancer](#)
- [Small cell lung cancer](#)

Disease

- [Adenocarcinoma](#)
- [Ataxia telangiectasia](#)
- [Colonic Neoplasms](#)
- [Colorectal Neoplasms](#)
- [Esophageal Neoplasms](#)
- [Genetic Predisposition to Disease](#)
- [Genetic Predisposition to Disease](#)
- [Kidney Failure](#)
- [Lung Neoplasms](#)
- [Multiple Sclerosis](#)
- [Neoplasms](#)
- [Ovarian cancer](#)
- [Ovarian Neoplasms](#)
- [Ovarian Neoplasms](#)
- [Pulmonary Disease](#)
- [Rectal Neoplasms](#)
- [Urinary Bladder Neoplasms](#)
- [Werner syndrome](#)