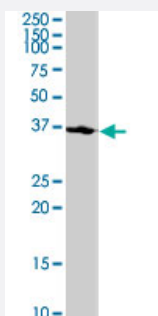


CDK7 (phospho T170) polyclonal antibody

Catalog # PAB0439

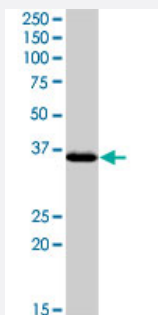
Size 400 uL

Applications



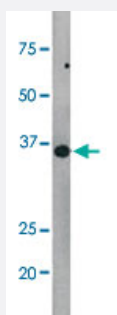
Western Blot (Tissue lysate)

CDK7 (phospho T170) polyclonal antibody (Cat # PAB0439). Western blot analysis of CDK7 expression in human kidney.



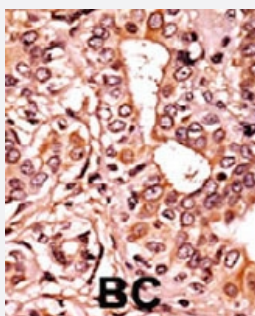
Western Blot (Cell lysate)

CDK7 (phospho T170) polyclonal antibody (Cat # PAB0439). Western blot analysis of CDK7 expression in Hela S3 NE.



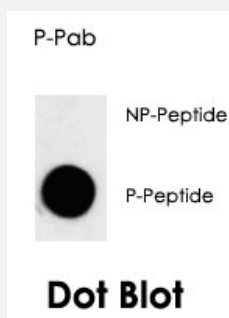
Western Blot (Cell lysate)

The CDK7 (phospho T170) polyclonal antibody (Cat # PAB0439) is used in Western blot to detect Phospho-CDK7-T170 in Ramos cell lysate



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Formalin-fixed and paraffin-embedded human cancer tissue reacted with CDK7 (phospho T170) polyclonal antibody (Cat # PAB0439) which was peroxidase-conjugated to the secondary antibody followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma.



Dot Blot (Peptide)

Dot blot analysis of CDK7 (phospho T170) polyclonal antibody (Cat # PAB0439) on nitrocellulose membrane. 50 ng of phospho-peptide or non phospho-peptide per dot were adsorbed.

Specification

Product Description	Rabbit polyclonal antibody raised against synthetic phosphopeptide of CDK7.
Immunogen	Synthetic phosphopeptide (conjugated with KLH) corresponding to residues surrounding T170 of human CDK7.
Host	Rabbit
Reactivity	Human
Form	Liquid
Purification	Protein G purification
Recommend Usage	Western Blot (1:1000) Dot Blot (1:100-500) Immunohistochemistry (1:50-100) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (0.09% sodium azide)
Storage Instruction	Store at 4°C. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Western Blot (Tissue lysate)

CDK7 (phospho T170) polyclonal antibody (Cat # PAB0439). Western blot analysis of CDK7 expression in human kidney.

[Protocol Download](#)

- Western Blot (Cell lysate)

CDK7 (phospho T170) polyclonal antibody (Cat # PAB0439). Western blot analysis of CDK7 expression in Hela S3 NE.

[Protocol Download](#)

- Western Blot (Cell lysate)

The CDK7 (phospho T170) polyclonal antibody (Cat # PAB0439) is used in Western blot to detect Phospho-CDK7-T170 in Ramos cell lysate

- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Formalin-fixed and paraffin-embedded human cancer tissue reacted with CDK7 (phospho T170) polyclonal antibody (Cat # PAB0439) which was peroxidase-conjugated to the secondary antibody followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma.

- Dot Blot (Peptide)

Dot blot analysis of CDK7 (phospho T170) polyclonal antibody (Cat # PAB0439) on nitrocellulose membrane. 50 ng of phospho-peptide or non phospho-peptide per dot were adsorbed.

Gene Info — CDK7

Entrez GeneID [1022](#)

Protein Accession# [NP_001790:P50613](#)

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* cdc 28, 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

Publication Reference

- [The Tat/TAR-dependent phosphorylation of RNA polymerase II C-terminal domain stimulates cotranscriptional capping of HIV-1 mRNA.](#)
Zhou M, Deng L, Kashanchi F, Brady JN, Shatkin AJ, Kumar A.
PNAS 2003 Oct; 100(22):12666.
- [Transcription factor TFIIH components enhance the GR coactivator activity but not the cell cycle-arresting activity of the human immunodeficiency virus type-1 protein Vpr.](#)
Kino T, Tsukamoto M, Chrousos G.
Biochemical and Biophysical Research Communications 2002 Oct; 298(1):17.
- [The cyclin H/cdk7/Mat1 kinase activity is regulated by CK2 phosphorylation of cyclin H.](#)
Schneider E, Kartarius S, Schuster N, Montenarh M.
Oncogene 2002 Aug; 21(33):5031.

Pathway

- [Cell cycle](#)
- [Nucleotide excision repair](#)

Disease

- [Adenocarcinoma](#)
- [Ataxia telangiectasia](#)
- [Colonic Neoplasms](#)
- [Colorectal Neoplasms](#)
- [Esophageal Neoplasms](#)
- [Genetic Predisposition to Disease](#)
- [Kidney Failure](#)
- [Lung Neoplasms](#)
- [Multiple Sclerosis](#)

- [Ovarian Neoplasms](#)
- [Pulmonary Disease](#)
- [Rectal Neoplasms](#)
- [Urinary Bladder Neoplasms](#)
- [Werner syndrome](#)