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Phospho-CDC6(S54) Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP3058a

Product Information

Application	WB, IHC-P, E
Primary Accession	Q99741
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB7524
Calculated MW	62720

Additional Information

Gene ID	990
Other Names	Cell division control protein 6 homolog, CDC6-related protein, Cdc18-related protein, HsCdc18, p62(cdc6), HsCDC6, CDC6, CDC18L
Target/Specificity	This CDC6 Antibody is generated from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding S54 of human CDC6.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Phospho-CDC6(S54) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CDC6
Synonyms	CDC18L
Function	Involved in the initiation of DNA replication. Also participates in checkpoint controls that ensure DNA replication is completed before mitosis is initiated.

Cellular Location	Nucleus. Cytoplasm Note=The protein is nuclear in G1 and cytoplasmic in S-phase cells (PubMed:9566895).

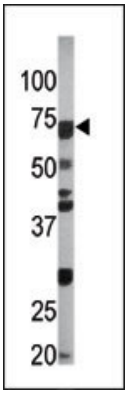
Background

The protein encoded by this gene is highly similar to Saccharomyces cerevisiae Cdc6, a protein essential for the initiation of DNA replication. This protein functions as a regulator at the early steps of DNA replication. It localizes in cell nucleus during cell cyle G1, but translocates to the cytoplasm at the start of S phase. The subcellular translocation of this protein during cell cyle is regulated through its phosphorylation by Cdks. Transcription of this protein was reported to be regulated in response to mitogenic signals through transcriptional control mechanism involving E2F proteins.

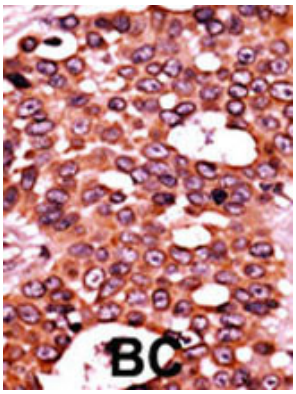
References

Alexandrow, M.G., et al., Mol. Cell. Biol. 24(4):1614-1627 (2004).
Yim, H., et al., Mol. Biol. Cell 14(10):4250-4259 (2003).
Clay-Farrace, L., et al., EMBO J. 22(3):704-712 (2003).
Pelizon, C., et al., EMBO Rep. 3(8):780-784 (2002).
Bermejo, R., et al., Mol. Biol. Cell 13(11):3989-4000 (2002).

Images



The anti-Phospho-CDC6-S54 Pab (Cat. #AP3058a) is used in Western blot to detect Phospho-CDC6-S54 in Ramos tissue lysate



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, 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; HC = hepatocarcinoma.