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CDK10 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7516A

Product Information

Application	WB, IHC-P, E
Primary Accession	Q15131
Other Accession	Q3UMM4
Reactivity	Human
Predicted	Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	41038
Antigen Region	1-32

Additional Information

Gene ID	8558
Other Names	Cyclin-dependent kinase 10, Cell division protein kinase 10, Serine/threonine-protein kinase PISSLRE, CDK10
Target/Specificity	This CDK10 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-32 amino acids from the N-terminal region of human CDK10.
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 prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
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	CDK10 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CDK10
Function	Cyclin-dependent kinase that phosphorylates the transcription factor ETS2 (in vitro) and positively controls its proteasomal degradation (in cells) (PubMed:24218572). Involved in the regulation of actin cytoskeleton

organization through the phosphorylation of actin dynamics regulators such as PKN2. Is a negative regulator of ciliogenesis through phosphorylation of PKN2 and promotion of RhoA signaling (PubMed:27104747).

Cellular Location Cytoplasm, cytoskeleton, cilium basal body

Background

CDK10 belongs to the CDK subfamily of the Ser/Thr protein kinase family. The CDK subfamily members are highly similar to the gene products of S. cerevisiae cdc28, and S. pombe cdc2, and are known to be essential for cell cycle progression. This kinase has been shown to play a role in cellular proliferation. Its function is limited to cell cycle G2-M phase.

References

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Brambilla, R., et al., Oncogene 9(10):3037-3041 (1994).
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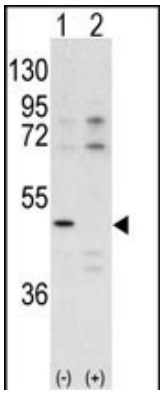
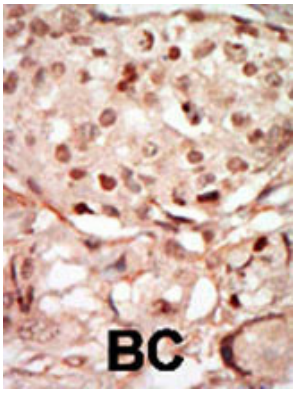
Images



Western blot analysis of CDK10 antibody (N-term) (Cat. #AP7516a) pre-incubated with (Lane1) and without (Lane 2) blocking peptide (Cat. #BP7516a) in A375 cell line lysate. CDK10 (arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

Citations

- Decreased CDK10 expression correlates with lymph node metastasis and predicts poor outcome in breast cancer patients - a short report.
- Elevated C1orf63 expression is correlated with CDK10 and predicts better outcome for advanced breast cancers: a retrospective study.
- Identification of nuclear structural protein alterations associated with seminomas.
- Identification of CDK10 as an important determinant of resistance to endocrine therapy for breast cancer.