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Cdc25A Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6272c

Product Information

Application	IHC-P, WB, E
Primary Accession	P30304
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB07640
Calculated MW	59087
Antigen Region	271-300

Additional Information

Gene ID	993
Other Names	M-phase inducer phosphatase 1, Dual specificity phosphatase Cdc25A, CDC25A
Target/Specificity	This Cdc25A antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 271-300 amino acids from the Central region of human Cdc25A.
Dilution	IHC-P~~1:100~500 WB~~1:1000 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	Cdc25A Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CDC25A
Function	Tyrosine protein phosphatase which functions as a dosage- dependent inducer of mitotic progression (PubMed:12676925, PubMed:14559997, PubMed:1836978, PubMed:20360007). Directly dephosphorylates CDK1 and stimulates its kinase activity (PubMed:20360007). Also dephosphorylates

CDK2 in complex with cyclin-E, in vitro (PubMed:20360007).

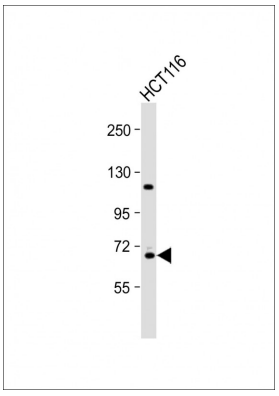
Background

CDC25A is a member of the CDC25 family of phosphatases. CDC25A is required for progression from G1 to the S phase of the cell cycle. It activates the cyclin-dependent kinase CDC2 by removing two phosphate groups. CDC25A is specifically degraded in response to DNA damage, which prevents cells with chromosomal abnormalities from progressing through cell division. CDC25A is an oncogene, although its exact role in oncogenesis has not been demonstrated.

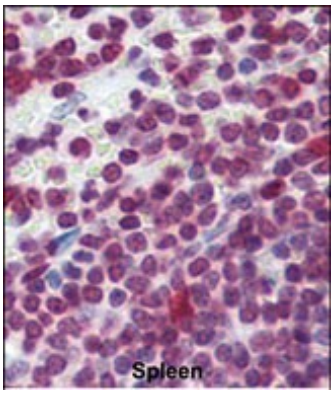
References

Ito, Y., et al., Int. J. Mol. Med. 13(3):431-435 (2004).
Nemoto, K., et al., Prostate 58(1):95-102 (2004).
Goloudina, A., et al., Cell Cycle 2(5):473-478 (2003).
Chen, M.S., et al., Mol. Cell. Biol. 23(21):7488-7497 (2003).
Chow, J.P., et al., Mol. Biol. Cell 14(10):3989-4002 (2003).

Images



Anti-Cdc25A Antibody (Center) at 1:2000 dilution + HCT116 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 59 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Formalin-fixed and paraffin-embedded human Spleen tissue reacted with Cdc25A Antibody (Center)(Cat.#AP6272c), 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.

Citations

- A novel recurrent CHEK2 Y390C mutation identified in high-risk Chinese breast cancer patients impairs its activity and is associated with increased breast cancer risk.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.