

CDC25B Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP7256c

Specification

CDC25B Antibody (Center) - Product Information

Application Primary Accession Reactivity Host Clonality	WB, IHC-P,E <u>P30305</u> Human Rabbit Polyclonal
Isotype	Rabbit IgG
Antigen Region	331-360

CDC25B Antibody (Center) - Additional Information

Gene ID 994

Other Names M-phase inducer phosphatase 2, Dual specificity phosphatase Cdc25B, CDC25B, CDC25HU2

Target/Specificity

This CDC25B antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 331-360 amino acids from the Central region of human CDC25B.

Dilution WB~~1:2000 IHC-P~~1:10~50 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 CDC25B Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

CDC25B Antibody (Center) - Protein Information

Name CDC25B

Synonyms CDC25HU2



Function Tyrosine protein phosphatase which functions as a dosage- dependent inducer of mitotic progression (PubMed:<u>1836978</u>, PubMed:<u>20360007</u>). Directly dephosphorylates CDK1 and stimulates its kinase activity (PubMed:<u>20360007</u>). Required for G2/M phases of the cell cycle progression and abscission during cytokinesis in a ECT2-dependent manner (PubMed:<u>17332740</u>). The three isoforms seem to have a different level of activity (PubMed:<u>1836978</u>).

Cellular Location

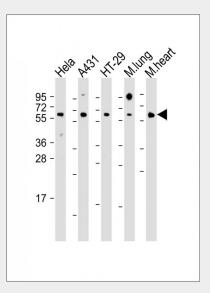
Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Cytoplasm, cytoskeleton, spindle pole

CDC25B Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

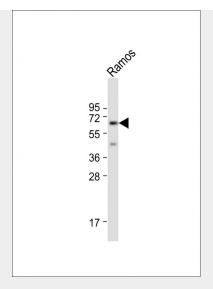
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

CDC25B Antibody (Center) - Images

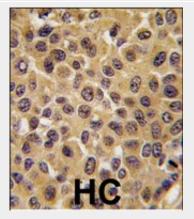


All lanes : Anti-CDC25B Antibody (Center) at 1:1000 dilution Lane 1: Hela whole cell lysate Lane 2: A431 whole cell lysate Lane 3: HT-29 whole cell lysate Lane 4: mouse lung lysate Lane 5: mouse heart lysate Lysates/proteins at 20 μ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 65 kDa Blocking/Dilution buffer: 5% NFDM/TBST.





Anti-CDC25B(S353) Antibody at 1:2000 dilution + Ramos whole cell lysate Lysates/proteins at 20 μ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 63 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Formalin-fixed and paraffin-embedded human breast carcinoma tissue reacted with CDC25B antibody (Center), 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.

CDC25B Antibody (Center) - Background

CDC25B is a member of the CDC25 family of phosphatases. CDC25B activates the cyclin dependent kinase CDC2 by removing two phosphate groups and it is required for entry into mitosis. CDC25B shuttles between the nucleus and the cytoplasm due to nuclear localization and nuclear export signals. The protein is nuclear in the M and G1 phases of the cell cycle and moves to the cytoplasm during S and G2. CDC25B has oncogenic properties, although its role in tumor formation has not been determined.

CDC25B Antibody (Center) - References

Uchida, S., et al., Biochem. Biophys. Res. Commun. 316(1):226-232 (2004). Ito, Y., et al., Int. J. Mol. Med. 13(3):431-435 (2004). Wu, W., et al., Cancer Res. 63(19):6195-6199 (2003). Mils, V., et al., Exp. Cell Res. 285(1):99-106 (2003). Theis-Febvre, N., et al., Oncogene 22(2):220-232 (2003). **CDC25B Antibody (Center) - Citations**



- <u>CDC25B promotes influenza A virus replication by regulating the phosphorylation of nucleoprotein.</u>
- IFI27, a novel epidermal growth factor-stabilized protein, is functionally involved in proliferation and cell cycling of human epidermal keratinocytes.