

# Cdc25B Antibody (N-term) (A166)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP7256d

#### **Product Information**

Application WB, E
Primary Accession P30305
Reactivity Human
Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG

Clone Names RB07932;RB07931

Calculated MW 64987 Antigen Region 165-194

### **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 165-194 amino acids from the

N-terminal region of human Cdc25B.

**Dilution** 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** Cdc25B Antibody (N-term) (A166) is for research use only and not for use in

diagnostic or therapeutic procedures.

#### **Protein Information**

Name CDC25B

Synonyms CDC25HU2

**Function** Tyrosine protein phosphatase which functions as a dosage- dependent

inducer of mitotic progression (PubMed: 1836978, PubMed: 20360007).

Directly dephosphorylates CDK1 and stimulates its kinase activity (PubMed:20360007). Required for G2/M phases of the cell cycle progression and abscission during cytokinesis in a ECT2-dependent manner (PubMed:17332740). The three isoforms seem to have a different level of activity (PubMed:1836978).

**Cellular Location** 

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

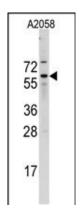
# **Background**

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.

## 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).

## **Images**



Western blot analysis of Cdc25B Antibody (N-term)(A166)(Cat# AP7256d) in A2058 cell line lysates (35ug/lane). Cdc25B (arrow) was detected using the purified Pab.

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