

CDC25B Antibody (Center) Blocking Peptide

Synthetic peptide Catalog # BP7256c

Specification

CDC25B Antibody (Center) Blocking Peptide - Product Information

Primary Accession

<u>P30305</u>

CDC25B Antibody (Center) Blocking Peptide - Additional Information

Gene ID 994

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

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP7256c was selected from the Center region of human CDC25B. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

CDC25B Antibody (Center) Blocking Peptide - 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). 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

CDC25B Antibody (Center) Blocking Peptide - Protocols

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

<u>Blocking Peptides</u>

CDC25B Antibody (Center) Blocking Peptide - Images

CDC25B Antibody (Center) Blocking Peptide - 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) Blocking Peptide - 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).