

Phospho-CDC25B(S187) Antibody Blocking peptide
Synthetic peptide
Catalog # BP3053a**Specification**

Phospho-CDC25B(S187) Antibody Blocking peptide - Product InformationPrimary Accession [P30305](#)**Phospho-CDC25B(S187) Antibody 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 [AP3053a](/product/products/AP3053a) was selected from the 166-180 region of human Phospho-CDC25B-S187. 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.

Phospho-CDC25B(S187) Antibody Blocking peptide - Protein Information**Name** CDC25B**Synonyms** CDC25HU2**Function**

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

Cellular Location

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

Phospho-CDC25B(S187) Antibody Blocking peptide - Protocols

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

- [Blocking Peptides](#)

Phospho-CDC25B(S187) Antibody Blocking peptide - Images**Phospho-CDC25B(S187) Antibody 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. Multiple transcript variants for this gene exist.

Phospho-CDC25B(S187) Antibody 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).