

#### Phospho-CDC25A(S278) Antibody Blocking peptide Synthetic peptide Catalog # BP3047a

### Specification

## Phospho-CDC25A(S278) Antibody Blocking peptide - Product Information

Primary Accession

<u>P30304</u>

## Phospho-CDC25A(S278) Antibody Blocking peptide - Additional Information

Gene ID 993

**Other Names** M-phase inducer phosphatase 1, Dual specificity phosphatase Cdc25A, CDC25A

## Target/Specificity

The synthetic peptide sequence used to generate the antibody <a href=/product/products/AP3047a>AP3047a</a> was selected from the 272-286 <CR> region of human Phospho-CDC25A-S278. 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-CDC25A(S278) Antibody Blocking peptide - Protein Information

Name CDC25A

#### Function

Tyrosine protein phosphatase which functions as a dosage- dependent inducer of mitotic progression (PubMed:<a href="http://www.uniprot.org/citations/1836978" target="\_blank">1836978</a>, PubMed:<a href="http://www.uniprot.org/citations/12676925" target="\_blank">12676925</a>, PubMed:<a href="http://www.uniprot.org/citations/14559997" target="\_blank">14559997</a>, PubMed:<a href="http://www.uniprot.org/citations/20360007" target="\_blank">20360007</a>). Directly dephosphorylates CDK1 and stimulates its kinase activity (PubMed:<a href="http://www.uniprot.org/citations/20360007" target="\_blank">20360007</a>). Also dephosphorylates CDK2 in complex with cyclin-E, in vitro

(PubMed:<a href="http://www.uniprot.org/citations/20360007" target="\_blank">20360007</a>).



# Phospho-CDC25A(S278) Antibody Blocking peptide - Protocols

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

### Blocking Peptides

# Phospho-CDC25A(S278) Antibody Blocking peptide - Images

### Phospho-CDC25A(S278) Antibody Blocking peptide - 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. Two transcript variants encoding different isoforms have been found for this gene.

#### Phospho-CDC25A(S278) Antibody Blocking peptide - 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).