

**Phospho-CDC25A(T507) Antibody**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AW5441**

**Specification**

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**Phospho-CDC25A(T507) Antibody - Product Information**

|                   |                                                                          |
|-------------------|--------------------------------------------------------------------------|
| Application       | WB, IF, E                                                                |
| Primary Accession | <a href="#">P30304</a>                                                   |
| Other Accession   | <a href="#">P48965</a> , <a href="#">P48964</a> , <a href="#">A7MBD1</a> |
| Reactivity        | Human                                                                    |
| Predicted         | Bovine, Mouse, Rat                                                       |
| Host              | Rabbit                                                                   |
| Clonality         | Polyclonal                                                               |
| Calculated MW     | H=59,55;M=58;R=59 KDa                                                    |
| Isotype           | Rabbit IgG                                                               |
| Antigen Source    | HUMAN                                                                    |

**Phospho-CDC25A(T507) Antibody - Additional Information**

**Gene ID** 993

**Other Names**

M-phase inducer phosphatase 1, Dual specificity phosphatase Cdc25A, CDC25A

**Dilution**

WB~~1:1000

IF~~1:25

**Target/Specificity**

This CDC25A Antibody is generated from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding T507 of human CDC25A.

**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**

Phospho-CDC25A(T507) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Phospho-CDC25A(T507) Antibody - Protein Information**

**Name** CDC25A

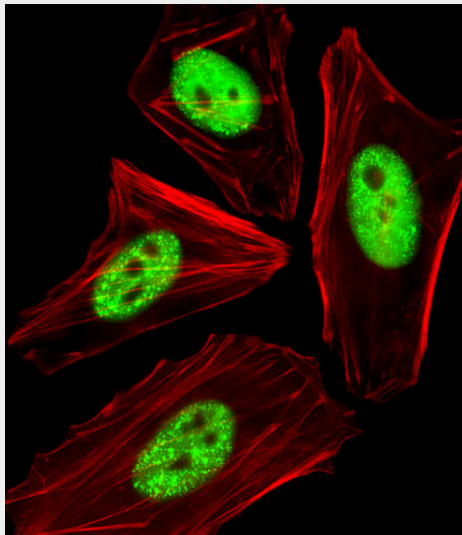
**Function**

Tyrosine protein phosphatase which functions as a dosage- dependent inducer of mitotic progression (PubMed:<a href="http://www.uniprot.org/citations/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/1836978" target="\_blank">1836978</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>).

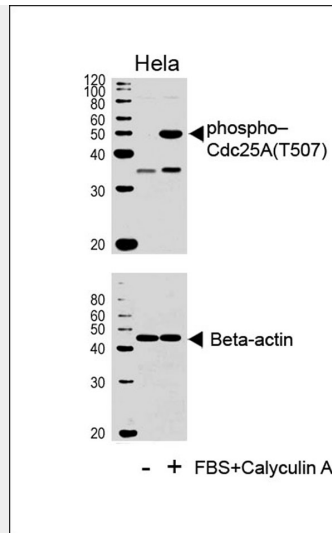
**Phospho-CDC25A(T507) Antibody - Protocols**

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Phospho-CDC25A(T507) Antibody - Images**

Fluorescent image of HeLa cells stained with Phospho-CDC25A(T507) Antibody(Cat#AW5441). AW5441 was diluted at 1:25 dilution. An Alexa Fluor 488-conjugated goat anti-rabbit IgG at 1:400 dilution was used as the secondary antibody (green). Cytoplasmic actin was counterstained with Alexa Fluor® 555 conjugated with Phalloidin (red).



Western blot analysis of lysates from HeLa cell line, untreated or treated with FBS and calyculin A, using Phospho-CDC25A(T507) Antibody (upper) or Beta-actin (lower).

### Phospho-CDC25A(T507) Antibody - 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(T507) Antibody - 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).