

Phospho-CDC25A(T507) Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AW5441

Product Information

Application IF, WB Primary Accession P30304

Other Accession P48965, P48964, A7MBD1

Reactivity
Predicted
Mouse, Rat
Host
Clonality
Polyclonal
Calculated MW
Isotype
Antigen Source
HUMAN

Additional Information

Gene ID 993

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

CDC25A

Dilution IF~~1:25 WB~~1:1000

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.

Protein Information

Name CDC25A

Function Tyrosine protein phosphatase which functions as a dosage- dependent

inducer of mitotic progression (PubMed:<u>12676925</u>, PubMed:<u>14559997</u>, PubMed:<u>1836978</u>, PubMed:<u>20360007</u>). Directly dephosphorylates CDK1 and

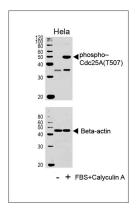
Background

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.

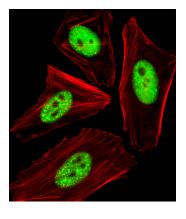
References

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).

Images



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).



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).

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