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Store at -20C
#9525

cdc25B Antibody

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W	H M R Mk	Endogenous	62	Rabbit	#P30305	994

Product Usage Information

Application

Western Blotting

Dilution

1:1000

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

Specificity/Sensitivity

cdc25B Antibody recognizes endogenous levels of total cdc25B protein.

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues at the carboxy terminus of human cdc25B. Antibodies are purified by protein A and peptide affinity chromatography.

Background

Cdc25 is a protein phosphatase responsible for dephosphorylating and activating cdc2, a crucial step in regulating the entry of all eukaryotic cells into mitosis (1). cdc25C is constitutively phosphorylated at Ser216 throughout interphase by c-TAK1, while phosphorylation at this site is DNA damage-dependent at the G2/M checkpoint (2). When phosphorylated at Ser216, cdc25C binds to members of the 14-3-3 family of proteins, sequestering cdc25C in the cytoplasm and thereby preventing premature mitosis (3). The checkpoint kinases Chk1 and Chk2 phosphorylate cdc25C at Ser216 in response to DNA damage (4,5).

The major 14-3-3 binding sites of cdc25B are Ser309 and Ser361, both of which can be phosphorylated by p38 in response to ultraviolet radiation (6).

Background References

- Jessus, C. and Ozon, R. (1995) *Prog. Cell Cycle Res.* 1, 215-228.
- Peng, C.Y. et al. (1997) *Science* 277, 1501-1505.
- Kumagai, A. and Dunphy, W.G. (1999) *Genes Dev.* 13, 1067-1072.
- Blasina, A. et al. (1999) *Curr. Biol.* 9, 1-10.
- Furnari, B. et al. (1999) *Mol. Biol. Cell* 10, 833-845.
- Bulavin, D.V. et al. (2001) *Nature* 411, 102-7.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween@ 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting

Cross-Reactivity Key

H: Human **M:** Mouse **R:** Rat **Mk:** Monkey

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