

**Phospho Cdc25C (pS216) Rabbit Monoclonal Antibody
Product Data Sheet**

Catalog #1190-1

Clone ID: E190 **Lot #:** Please refer to vial
Quantity: 100 µl
Type: Rabbit Monoclonal IgG
Species Cross-reactivity: Human Mouse Rat
Applications: WB IHC ICC Flow Cytometry IP
Molecular Wt.: 60 kDa
UniProt ID: P30307

Background: Cdc25C is a tyrosine protein phosphatase required for progression of the cell cycle. Cdc25C activates cell cycle-specific cyclin-dependent kinases (CDKs), including cdc2, via dephosphorylation events (1,2). Cdc25C is activated via phosphorylation at Ser216 (3). In response to DNA damage and DNA replicational stress, Chk1 and Chk2 phosphorylate Cdc25C to prevent entry into mitosis (4,5).

Specificity: A synthetic phospho-peptide corresponding to residues surrounding Ser216 of human Cdc25C was used as immunogen. The antibody only detects Cdc25C phosphorylated on Serine 216.

Storage Conditions: Store at -20 °C. Buffer: 50 mM Tris-Glycine (pH 7.4), 0.15 M NaCl, 40% Glycerol, 0.01% sodium azide and 0.05% BSA. Stable for 12 months from date of receipt.

Recommended Dilutions:

WB: 1:1,000
ICC: 1:50
IP: 1:30

Background References:

1. Sadhu, K., et al. Human homolog of fission yeast cdc25 mitotic inducer is predominantly expressed in G2. *Proc Natl Acad Sci U S A.* 87: 5139-43 (1990).
2. Jessus, C. and R. Ozon. Function and regulation of cdc25 protein phosphate through mitosis and meiosis. *Prog. Cell Cycle Res.* 1: 215-228 (1995).
3. Peng, C.Y., et al. Mitotic and G2 checkpoint control: regulation of 14-3-3 protein binding by phosphorylation of Cdc25C on serine-216. *Science* 277: 1501-1505 (1997).
4. Blasina, A., et al. A human homologue of the checkpoint kinase Cds1 directly inhibits Cdc25 phosphatase. *Curr Biol.* 9: 1-10 (1999).
5. Matsuoka, S., et al. Linkage of ATM to cell cycle regulation by the Chk2 protein kinase. *Science* 282: 1893-7 (1998).

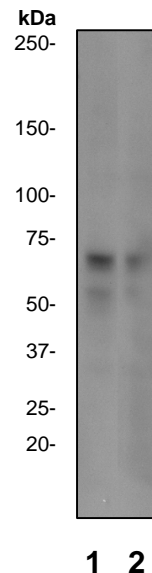


Fig 1. Western blot analysis on HeLa cell lysates using anti-Phospho-Cdc25C (pS216) RabMAb (cat. #1190-1); dilution 1:1,000. Cells were (1) untreated and (2) treated with Phosphatase.

Product QC'd by: _____

For research use only. Not for use in diagnostic or therapeutic applications.

This product was manufactured under U.S. Patent No. 5,675,063 and and 5,599,681. For a complete list of protocols and available related products, please visit www.epitomics.com.

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