



## PROTEIN BIOTECHNOLOGIES

### **CDC25C (CLONE TC-14) MOUSE MONOCLONAL ANTIBODY**

**Catalog Number:** PBT-2107

**Description:** The cdc25 family of proteins is composed of three members, cdc25A, cdc25B, and cdc25C. The different members activate the cyclin dependent kinases at different points in the cell cycle by dephosphorylating key residues. Cdc25C is a dual specific protein phosphatase that controls entry into mitosis by the dephosphorylation of cdk1 on Thr14 and Tyr15. Cdc25C activity is expressed predominantly in G2. Cdc25C selectively interacts with the cyclin B/cdk1 complex cytoplasmically and in fact is itself regulated by cyclin B/cdk1 in a positive feedback loop. Cdc25C itself exists as a phosphoprotein (56 kDa-59 kDa) that is phosphorylated on Ser216 throughout interphase but becomes dephosphorylated during mitosis. In the phosphorylated form, cdc25C binds a member of the 14-3-3 family of proteins, which constitutes a regulatory checkpoint for its activity. Cdc25C is phosphorylated by both prk and by a novel kinase, C-TAKI. In addition to regulation post-translationally by phosphorylation, the cdc25C gene is also p53 regulated, via a p53 response element in its promoter.

**Size:** 100 ug  
*The vial is provided with a 10% overfill. Maximum recovery can be obtained by centrifuging the vial briefly to collect any solution on the cap and tube sides.*

**Species Cross-Reactivity:** Human

**Application/Dilutions:**

Immunofluorescence:	2.5 ug/ml
Immunoprecipitation:	1.0 ug/sample
Western blot:	0.5-1.0 ug/ml

**Source:** RBF/DnJ mice were immunized with recombinant human cdc25C fragment corresponding to amino acids 1-258 and fusing the splenocytes with NS-1 mouse myeloma cells. Epitope is known to be between amino acid residues 1-150.

**Form/Storage:** Purified IgG<sub>1</sub> with 50% glycerol, 0.01% sodium azide and 1.0 mg/ml BSA. Store at -20° C. Avoid multiple freeze/thaw cycles.

**FOR RESEARCH USE ONLY**