



## PROTEIN BIOTECHNOLOGIES

### **CDC6 (CLONE 6-26) MOUSE MONOCLONAL ANTIBODY**

**Catalog Number:** PBT-2121

**Description:** The cdc6 protein, originally described in budding yeast (*cdc6p*), is essential and limiting for DNA synthesis. The protein functions as a replication initiation protein and as such is involved in the early steps of replication in eukaryotes serving as a "clamp-loader" for assembly of MCM proteins onto the replicating DNA. Recently the human homolog of the yeast *cdc6* protein has been identified. The human *cdc6* protein, p62cdc6, maps to chromosome 17q21.3 very close to the map position of the BRCA1 gene. Cdc6 is activated at the G1/S border by the activity of E2F3 and is expressed as a nuclear protein only in proliferating cells and not in quiescent cells. Recently *cdc6* has been shown to interact specifically with the active cyclin A/cdk2 complex resulting in the phosphorylation of the *cdc6* protein and a change in localization to the cytoplasmic compartment. Structurally, the *cdc6* protein contains a cyclin dependent phosphorylation site, destruction boxes, a nucleotide binding/ATPase domain, and a potential leucine zipper suggesting an interaction with other proteins. Interestingly, the *cdc6* protein has also been identified in a two-hybrid screen looking for PCNA interacting proteins.

**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, primate, rat. Not mouse.

**Application/Dilutions:** Immunoprecipitation: 1 ug/sample  
Western blot: 2.5 ug/ml

**Source:** Mice were immunized with recombinant human *cdc6* protein and fusing the splenocytes with NS1/Ag4-1 mouse myeloma cells.

**Form/Storage:** Purified IgG<sub>2a</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**