



PROTEIN BIOTECHNOLOGIES

CDC6 (CLONE 6-37) MOUSE MONOCLONAL ANTIBODY

Catalog Number: PBT-2122

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. Not mouse or rat.

Application/Dilutions: 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 IgG₁ 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