# Anti-Rb phospho-Thr821 antibody, mouse monoclonal (24A7)

**71-173 100 µg**

**Storage:** ship at 4℃ or -20℃and store at -20. Do not freeze by storing below -20℃.

**Immunogen:** A synthetic peptide containing phospho-Thr821 of human Rb

**Form:** Purified monoclonal antibody (IgG) 1mg/ml in PBS- with 50% glycerol, filter-sterilized

**Isotype:** Mouse IgG1 κ

**Reactivity**: Specific to human Rb phosphorylated at Thr821. Not tested for other species. Can detect endogenous levels of Rb phosphorylated at Thr821 in most cell lines.

**Applications**

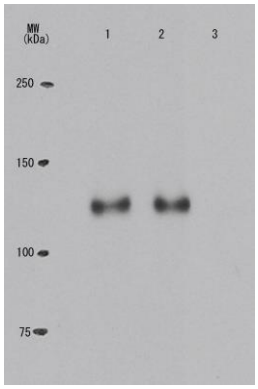
1. Western blotting (~1ug/ml)
2. ELISA Other applications were not tested.

**Background:** Retinoblastoma protein (Rb), the tumor suppressor product of the retinoblastoma susceptibility gene, is a 110 kDa protein that functions as a negative regulator of the cell cycle by arresting cells in the G1 phase and halting inappropriate cell proliferation. At the transcriptional level, Rb protein exerts its growth suppressive function by binding to transcription factors including E2F1, PU1, ATF2, UBF, Elf-1 and c-Abl . Loss of Rb function leads to uncontrolled cell growth and tumor development and is found in all retinoblastomas and in a variety of other human malignancies. The ability of Rb protein to inhinbit transcription and cell cycle progression is inactivated by phosphorylation, which is catalyzed by the cyclin-dependent protein kinases.

**Data Link** UniProtKB/Swiss-Prot P06400 (RB_HUMAN)

**Fig.1 Specificity of the monoclonal antibody (24A7) to the phosphorylated Rb at Thr821 as demonstrated by Western blotting.**

Crude extracts of human lung carcinoma cell line H1299 transfected with plasmid expressing Myc-tagged wild-type Rb (lane 1), Rb (S795A) (lane 2) or Rb (T821A) were immuno-precipitated with anti-Myc antibody and the precipitates were analyzed by Western blotting with monoclonal antibody #24A7 (Data provided by Dr. Y. Inoue at the JFCR Cancer Research Institute, Tokyo).




**Related product: #71-171 anti-Rb phospho-Ser795 antibody, monoclonal (28B5)**

**References** : This antibody has not been used in publication yet.