

## **Rb Monoclonal Antibody**

Catalog No: YM0553

Reactivity: Human

**Applications:** IHC;IF;ELISA

Target: Rb

**Fields:** >> Endocrine resistance; >> Cell cycle; >> Cellular senescence; >> Cushing

syndrome;>>Hepatitis C;>>Hepatitis B;>>Human cytomegalovirus

infection;>>Human papillomavirus infection;>>Human T-cell leukemia virus 1 infection;>>Kaposi sarcoma-associated herpesvirus infection;>>Epstein-Barr virus infection;>>Pathways in cancer;>>Viral carcinogenesis;>>Chemical carcinogenesis - receptor activation;>>Pancreatic cancer;>>Glioma;>>Prostate cancer;>>Melanoma;>>Bladder cancer;>>Chronic myeloid leukemia;>>Small cell lung cancer;>>Non-small cell lung cancer;>>Breast cancer;>>Hepatocellular

carcinoma;>>Gastric cancer

Gene Name: RB1

Protein Name: Retinoblastoma-associated protein

Human Gene Id: 5925

Human Swiss Prot P06400

No:

**Mouse Swiss Prot** 

No:

P13405

**Immunogen:** Purified recombinant fragment of human Rb expressed in E. Coli.

**Specificity:** Rb Monoclonal Antibody detects endogenous levels of Rb protein.

**Formulation:** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Monoclonal, Mouse

**Dilution :** IHC 1:200 - 1:1000. ELISA: 1:10000.. IF 1:50-200

Affinity purification



**Btorfaget®tability:** -15°C to -25°C/1 year(Do not lower than -25°C)

**Cell Pathway:** Stem cell pathway; Cell\_Cycle\_G1S;Cell\_Cycle\_G2M\_DNA;

Protein\_Acetylation

P References: 1. Oncogene 19: 562-570.

2. Cell 81: 323-330.

**Background:** The protein encoded by this gene is a negative regulator of the cell cycle and

was the first tumor suppressor gene found. The encoded protein also stabilizes constitutive heterochromatin to maintain the overall chromatin structure. The active, hypophosphorylated form of the protein binds transcription factor E2F1. Defects in this gene are a cause of childhood cancer retinoblastoma (RB), bladder cancer, and osteogenic sarcoma. [provided by RefSeq, Jul 2008],

**Function:** disease:Defects in RB1 are a cause of bladder cancer

[MIM:109800]., disease: Defects in RB1 are a cause of osteogenic sarcoma [MIM:259500]., disease: Defects in RB1 are the cause of childhood cancer retinoblastoma (RB) [MIM:180200]. RB is a congenital malignant tumor that arises from the nuclear layers of the retina. It occurs in about 1:20'000 live births and represents about 2% of childhood malignancies. It is bilateral in about 30% of cases. Although most RB appear sporadically, about 20% are transmitted as an autosomal dominant trait with incomplete penetrance. The diagnosis is usually made before the age of 2 years when strabismus or a gray to yellow reflex from pupil ("cat eye") is investigated., function: Key regulator of entry into cell division that acts as a tumor suppressor. Acts as a transcription repressor of E2F1 target

genes. The underphosphorylated, active form of RB1 interacts

Subcellular Location:

Nucleus . During keratinocyte differentiation, acetylation by KAT2B/PCAF is

required for nuclear localization. .

**Expression :** Expressed in the retina. Expressed in foreskin keratinocytes (at protein level)

(PubMed:20940255).

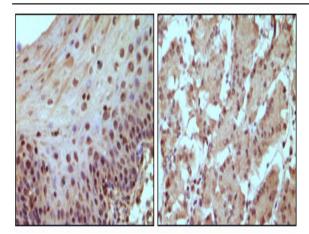
**Sort**: 14031

No4:

Host: Mouse

Modifications: Unmodified

## **Products Images**



Immunohistochemistry staining of paraffin-embedded human normal esophagus (A) and stomach (B) tissue, showing nucleus localization with DAB staining using Rb Monoclonal Antibody.