



Rb (phospho Ser780) Polyclonal Antibody

Catalog No	YP-Ab-00166
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;IHC;IF;ELISA
Gene Name	RB1
Immunogen	The antiserum was produced against synthesized peptide derived from human Retinoblastoma around the phosphorylation site of Ser780. AA range:751-800
Specificity	Phospho-Rb (S780) Polyclonal Antibody detects endogenous levels of Rb protein only when phosphorylated at S780.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/10000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	Phospho RB;phospho-Rb;Phospho-Rb (Ser780);phospho-Rb Ser780;Phospho-RB1;Rb;RB1;Retinoblastoma-associated protein;p105-Rb;pRb;pp110
Observed Band	106kD
Calculated Molecular Weight	106kD
Cell Pathway	Nucleus . During keratinocyte differentiation, acetylation by KAT2B/PCAF is required for nuclear localization. .
Tissue Specificity	Expressed in the retina. Expressed in foreskin keratinocytes (at protein level) (PubMed:20940255).
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

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],

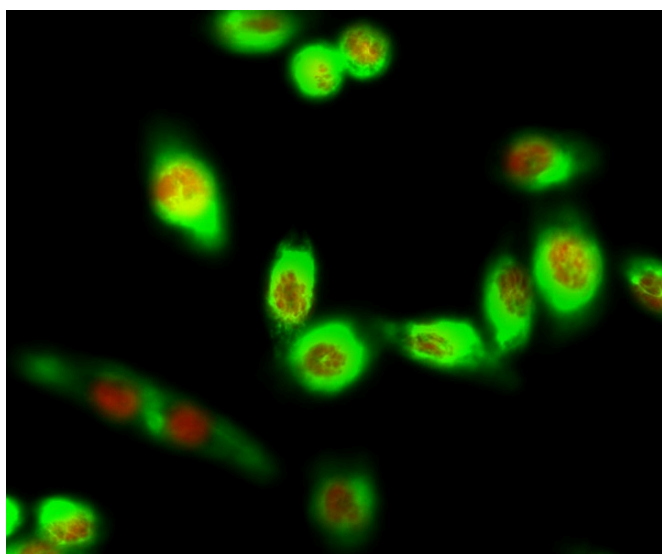
matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

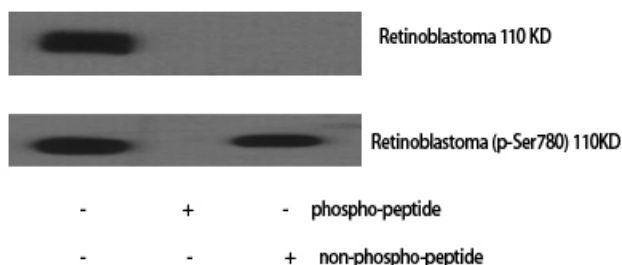
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

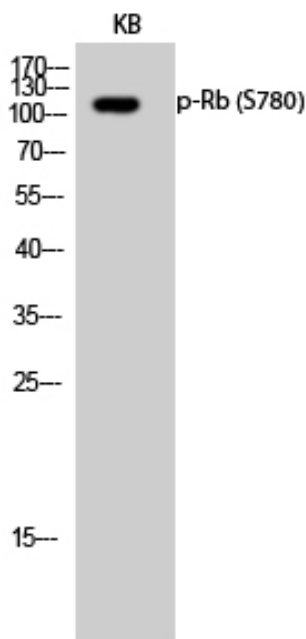
Products Images



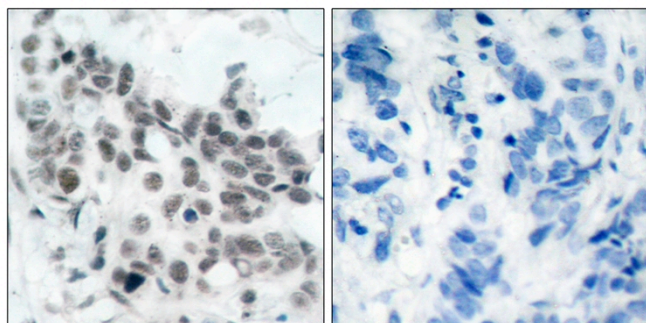
Immunofluorescence analysis of HeLa cell. 1, Rb (phospho Ser780) Polyclonal Antibody (red) was diluted at 1:200 (4° overnight). GFAP Monoclonal Antibody (5C8) (green) was diluted at 1:200 (4° overnight). 2, Goat Anti Rabbit Alexa Fluor 594 Catalog: RS3611 was diluted at 1:1000 (room temperature, 50min). Goat Anti Mouse Alexa Fluor 488 Catalog: RS3208 was diluted at 1:1000 (room temperature, 50min).

Western Blot analysis of various cells using Phospho-Rb (S780) Polyclonal Antibody cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003, Invent biotech, MN, USA).





Western Blot analysis of KB cells using Phospho-Rb (S780) Polyclonal Antibody cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003, Inventbiotech, MN, USA).



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using Retinoblastoma (Phospho-Ser780) Antibody. The picture on the right is blocked with the phospho peptide.

Western blot analysis of lysates from K562 cells treated with serum 10%, using Retinoblastoma (Phospho-Ser780) Antibody. The lane on the right is blocked with the phospho peptide.