



Rb (phospho Thr821) Polyclonal Antibody

Catalog No	YP-Ab-00247
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	IHC;IF;ELISA
Gene Name	RB1
Protein Name	Retinoblastoma-associated protein
Immunogen	The antiserum was produced against synthesized peptide derived from human Retinoblastoma around the phosphorylation site of Thr821. AA range:791-840
Specificity	Phospho-Rb (T821) Polyclonal Antibody detects endogenous levels of Rb protein only when phosphorylated at T821.
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	Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/40000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	RB1; Retinoblastoma-associated protein; p105-Rb; pRb; Rb; pp110
Observed Band	
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],

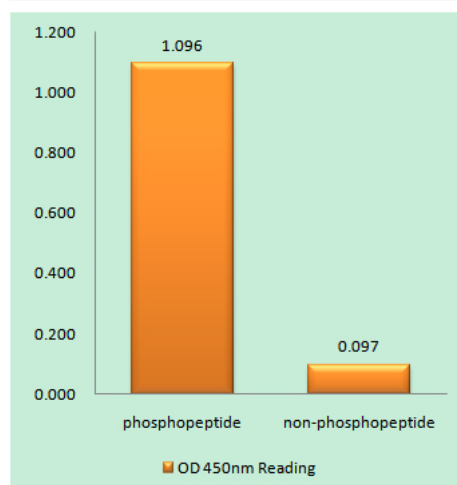
matters needing attention

Avoid repeated freezing and thawing!

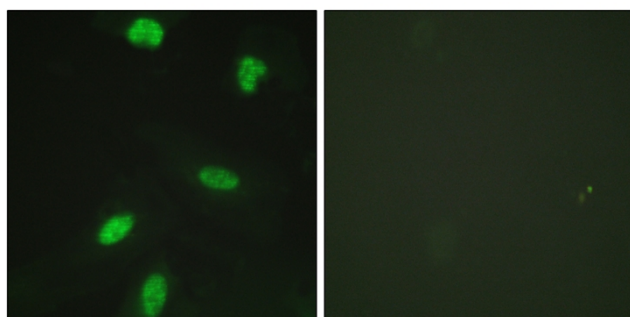
Usage suggestions

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

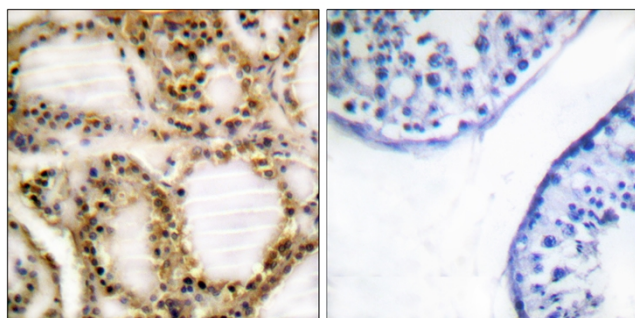
Products Images



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using Retinoblastoma (Phospho-Thr821) Antibody



Immunofluorescence analysis of HeLa cells, using Retinoblastoma (Phospho-Thr821) Antibody. The picture on the right is blocked with the phosphopeptide.



Immunohistochemistry analysis of paraffin-embedded human testis, using Retinoblastoma (Phospho-Thr821) Antibody. The picture on the right is blocked with the phosphopeptide.