

Rb(Phospho-Ser780) Antibody

Catalog No: #11132

Package Size: #11132-1 50ul #11132-2 100ul

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Description

Product Name	Rb(Phospho-Ser780) Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were produced by immunizing rabbits with synthetic phosphopeptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. Non-phospho specific antibodies were removed by chromatography using non-phosphopeptide.
Applications	WB IHC IF
Species Reactivity	Human;Mouse;Rat
Specificity	The antibody detects endogenous level of Rb only when phosphorylated at serine 780.
Immunogen Type	Peptide-KLH
Immunogen Description	Peptide sequence around phosphorylation site of serine 780 (T-L-S(p)-P-I) derived from Human Rb.
Conjugates	Unconjugated
Target Name	Rb
Modification	Phospho
Other Names	P105-RB; PP105; PP110; RB-1; RB1
Accession No.	Swiss-Prot: P06400NCBI Protein: NP_000312.2
Concentration	1.0mg/ml
Formulation	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C for long term preservation (recommended). Store at 4°C for short term use.

Application Details

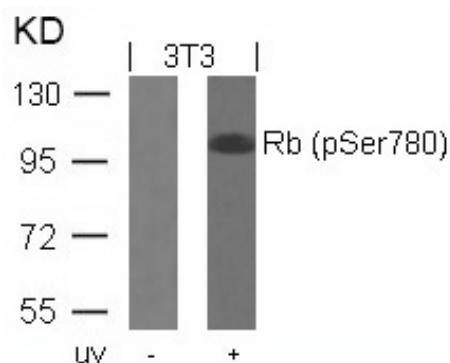
Predicted MW: 110kd

Western blotting: 1:500~1:1000

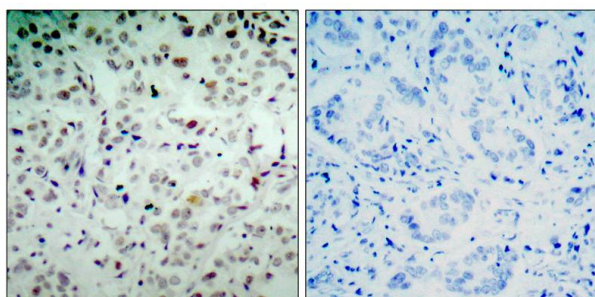
Immunohistochemistry: 1:50~1:100

Immunofluorescence: 1:100~1:200

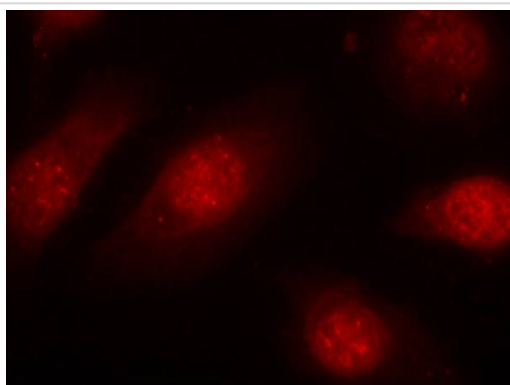
Images



Western blot analysis of extracts from 3T3 cells untreated or treated with UV using Rb(Phospho-Ser780) Antibody #11132.



Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using Rb(Phospho-Ser780) Antibody #11132(left) or the same antibody preincubated with blocking peptide(right).



Immunofluorescence staining of methanol-fixed HeLa cells using Rb(Phospho-Ser780) Antibody #11132.

Background

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 with E2F1 and represses its transcription activity, leading to cell cycle arrest. Directly involved in heterochromatin formation by maintaining overall chromatin structure and, in particular, that of constitutive heterochromatin by stabilizing histone methylation. Recruits and targets histone methyltransferases SUV39H1, SUV420H1 and SUV420H2, leading to epigenetic transcriptional repression. Controls histone H4 'Lys-20' trimethylation. Inhibits the intrinsic kinase activity of TAF1. In case of viral infections, interactions with SV40 large T antigen, HPV E7 protein or adenovirus E1A protein induce the disassembly of RB1-E2F1 complex thereby disrupting RB1's activity.

Roesch A, et al.(2005) *Mod Pathol*. 18(4): 565-572.

Huang H, et al.(2004)*Oncogene*. 23(12): 2161-2176.

Kitagawa M, et al.(1996)*EMBO J*. 15(24): 7060-7069.

Published Papers

Xueting Cai, Tingmei Ye, Chao Liu et al., Luteolin induced G2 phase cell cycle arrest and apoptosis on non-small cell lung cancer cells., *Toxicology in Vitro*, 25(7):1385-1391(2011)

[PMID:21601631](#)

et al., Palbociclib inhibits epithelial-mesenchymal transition and metastasis in breast cancer via c-Jun/COX-2 signaling pathway.In *Oncotarget* on 2015

Dec 8 by Ge Qin, Fei Xu et al..PMID: 26540629, , (2015)

[PMID:26540629](#)

el at., The potent novel CDK4/6 inhibitor TQB3616 in hormone receptor positive breast cancer: preclinical characterization with in vitro and human tumor xenograft modelsInBreast Cancer?On2023 Dec 8byWenyu Hu?#?1,?Lei Wang et al..PMID:?38090281, , (2023)

[PMID:38090281](#)

Note: This product is for in vitro research use only and is not intended for use in humans or animals.