Retinoblastoma (Phospho-Thr826) Antibody

Catalog No: #12106

Package Size: #12106-1 50ul #12106-2 100ul

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

Description

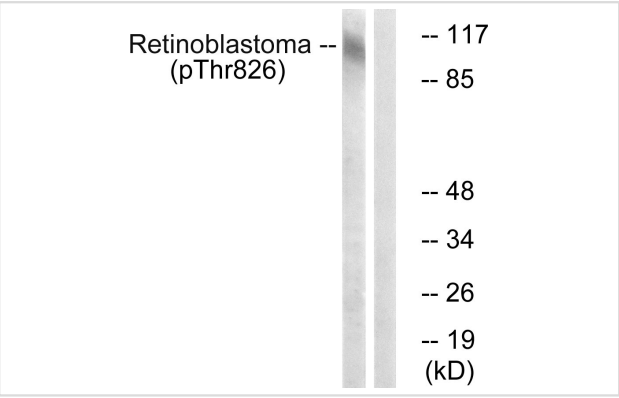
Product Name	Retinoblastoma (Phospho-Thr826) Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were produced by immunizing rabbits with synthetic phosphopeptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. Non-phospho specific antibodies were removed by chromatogramphy using non-phosphopeptide.
Applications	WB IF
Species Reactivity	Hu Ms Rt
Specificity	The antibody detects endogenous levels of Retinoblastoma only when phosphorylated at threonine 826.
Immunogen Type	peptide
Immunogen Description	Peptide sequence around phosphorylation site of threonine 826 (K-M-T(p)-P-R) derived from Human Retinoblastoma.
Target Name	Retinoblastoma
Modification	Phospho-Thr826
Other Names	P105-RB; PP105; PP110; RB-1; RB1; Retinoblastoma-associated protein
Accession No.	Swiss-Prot#:P06400;NCBI Gene#:5925
SDS-PAGE MW	110kd
Concentration	1.0mg/ml
Formulation	Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C

Application Details

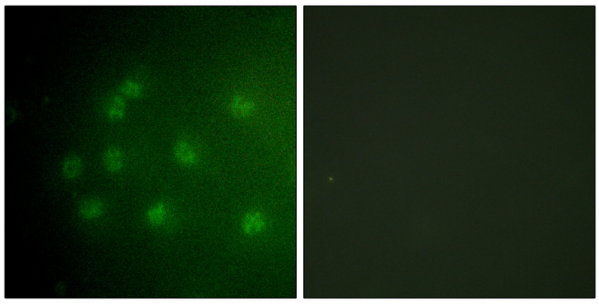
Western blotting: 1:500~1:3000

Immunofluorescence: 1:100~1:500

Images



Western blot analysis of extracts from HepG2 cells, treated with nocodazole (1ug/ml, 16hours), using Retinoblastoma (Phospho-Thr826) antibody #12106. The lane on the right is treated with the synthesized peptide.



Immunofluorescence analysis of COS7 cells, using Retinoblastoma (Phospho-Thr826) antibody #12106. The picture on the right is treated with the synthesized peptide.

Background

Key regulator of entry into cell division that acts as a tumor suppressor. Promotes G0-G1 transition when phosphorylated by CDK3/cyclin-C. 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. Mediates transcriptional repression by SMARCA4/BRG1 by recruiting a histone deacetylase (HDAC) complex to the c-FOS promoter. In resting neurons, transcription of the c-FOS promoter is inhibited by BRG1-dependent recruitment of a phospho-RB1-HDAC1 repressor complex. Upon calcium influx, RB1 is dephosphorylated by calcineurin, which leads to release of the repressor complex By similarity. 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.

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