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Anti-Spa310 (pRb2/p130) (RABBIT) Antibody

pRb2 p130 Antibody
Catalog # ASR5461

Specification

Anti-Spa310 (pRb2/p130) (RABBIT) Antibody - Product Information

Host	**Rabbit**
Conjugate	**Unconjugated**
Target Species	**Human**
Reactivity	**Human**
Clonality	**Polyclonal**
Application	**WB, E, IP, I, LCI**
Application Note	**This affinity purified antibody is tested for ELISA and western blotting. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 130 kDa in size corresponding to pRb2/p130, and a band approximately 4.2kDa in size corresponding to Spa310 peptide (latter not shown), by western blotting in the appropriate cell lysate or extract.**
Physical State	**Liquid (sterile filtered)**
Buffer	**0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2**
Immunogen	**This affinity purified antibody was prepared by repeated immunizations with a synthetic peptide corresponding to the Spa310 sequence of pRb2/p130 protein. A residue of cysteine was added to facilitate coupling.**
Preservative	**0.1% (w/v) Sodium Azide**

Anti-Spa310 (pRb2/p130) (RABBIT) Antibody - Additional Information

Gene ID 5934

Other Names
5934

Purity
This antiserum is directed against Spa310 and reacts with the Spa310 domain of pRb2/p130 from human tissues. Based on the sequence we expect this antibody to react as well Spa310 from chimpanzee and orangutan, and with lesser affinity, Spa310 from horse, dog, bovine, rat and opossum.

Storage Condition
Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted

liquid. Dilute only prior to immediate use.

Precautions Note
This product is for research use only and is not intended for therapeutic or diagnostic applications.

Anti-Spa310 (pRb2/p130) (RABBIT) Antibody - Protein Information

Name RBL2

Synonyms RB2

Function
Key regulator of entry into cell division. 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 KMT5B and KMT5C, leading to epigenetic transcriptional repression. Controls histone H4 'Lys-20' trimethylation. Probably acts as a transcription repressor by recruiting chromatin-modifying enzymes to promoters. Potent inhibitor of E2F-mediated trans-activation, associates preferentially with E2F5. Binds to cyclins A and E. Binds to and may be involved in the transforming capacity of the adenovirus E1A protein. May act as a tumor suppressor.

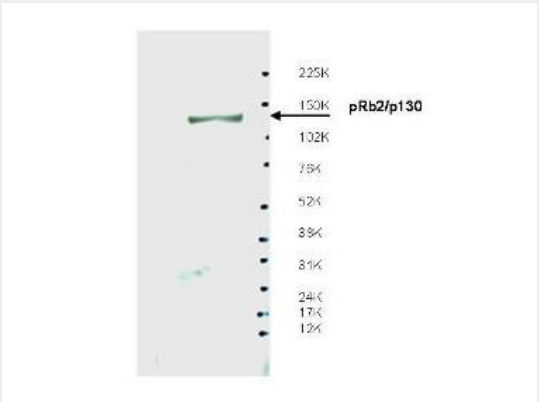
Cellular Location
Nucleus.

Anti-Spa310 (pRb2/p130) (RABBIT) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-Spa310 (pRb2/p130) (RABBIT) Antibody - Images



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Western blot using Rockland's affinity purified anti-Spa310 antibody shows detection of endogenous pRb2/p130 protein in whole LNCaP cell extracts. The band at ~130 kDa, indicated by the arrowhead, corresponds to the expected molecular weight of pRb2/p130. The membrane was blocked overnight with a milk buffer at 4° C. Primary antibody was diluted 1:500 and reacted with the membrane overnight at 4° C. ECL was used for detection. Personal communication, Ang Sun, Sbarro Institute for Cancer Research and Molecular Medicine, Temple University, Philadelphia, PA.

Anti-Spa310 (pRb2/p130) (RABBIT) Antibody - Background

Spa310 is a 39 aa-long polypeptide encoded by a sequence which resides in the spacer region of the tumor suppressor Rb2 gene. Rb2 is a member of the retinoblastoma (Rb) gene family. Proteins in this family, which also include pRb/p105 and pRb/p107, are important cellular factors which play well-recognized roles as tumor and growth suppressors. Both p107 and pRb2/p130 share the ability to physically interact and inhibit the kinase activity of the Cdk2/Cyclin A and Cdk2/Cyclin E complexes, which play critical roles in cell cycle regulation. Spa310 is the region of the pRb2/p130 protein that is responsible for Cdk2/Cyclin E/A inhibition. Spa310 has also been shown to suppress cell growth as observed by colony formation, and to reduce volume of tumor growth in nude mice, likely through arrest in the G 0 /G 1 phase of the cell cycle. Understandably, the Spa310 small molecule represents a potentially significant pharmaceutical product in the treatment of hyperproliferative disorders.