

Anti-Spa310 (pRb2/p130) (RABBIT) Antibody - 600-401-B11S

Code: 600-401-B11S

Size: 25 µL

Product Description: Anti-Spa310 (pRb2/p130) (RABBIT) Antibody - 600-401-B11S

Concentration: 1.39 mg/mL by UV absorbance at 280 nm

PhysicalState: Liquid (sterile filtered)

Label	Unconjugated
Host	Rabbit
Gene Name	RBL2
Species Reactivity	human, chimpanzee
Buffer	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Stabilizer	None
Preservative	0.1% (w/v) Sodium Azide
Storage Condition	Store vial at -20° C or below prior to opening. This vial contains a relatively low volume of reagent (25 µL). To minimize loss of volume dilute 1:10 by adding 225 µL of the buffer stated above directly to the vial. Recap, mix thoroughly and briefly centrifuge to collect the volume at the bottom of the vial. Use this intermediate dilution when calculating final dilutions as recommended below. Store the vial at -20°C or below after dilution. Avoid cycles of freezing and thawing.
Synonyms	130 kDa retinoblastoma associated protein antibody, RBR2 antibody, Retinoblastoma like 2 antibody, Retinoblastoma like protein 2 antibody, Retinoblastoma Related Gene antibody
Application Note	This affinity purified antibody is suitable 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.
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.
Purity And Specificity	This antiserum is directed against Spa310 and reacts with the Spa3120 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.
Assay Dilutions	User Optimized
ELISA	1:75,000 - 1:100,000
WESTERN BLOT	1:500 - 1:5,000
OTHER ASSAYS	User Optimized
Expiration	Expiration date is three (3) months from date of opening.
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.
General Reference	<p>Sun A., Bagella L., Tutton S., Romano G., Giordano A. (2007). From G0 to S phase: A view of the roles played by the retinoblastoma (Rb) family members in the Rb-E2F pathway. J Cell Biochem. Nov 2; 102(6): 1400-1404.</p> <p>Bagella L., Sun A., Tonini T., Abbadessa G., Cottone G., Paggi M.G., De Luca A., Claudio P.P., Giordano A. (2007). A small molecule based on the pRb2/p130 spacer domain leads to inhibition of cdk2 activity, cell cycle arrest and tumor growth reduction in vivo. Oncogene Mar 22; 26(13):1829-39.</p> <p>D'Andrilli G, Masciullo V, Bagella L, Tonini T, Minimo C, Zannoni GF, Giuntoli RL 2nd, Carlson JA Jr, Soprano DR, Soprano KJ, Scambia G, Giordano A. (2004). Frequent loss of pRb2/p130 in human ovarian carcinoma. Clin Cancer Res. May 1; 10(9):3098-103.</p>

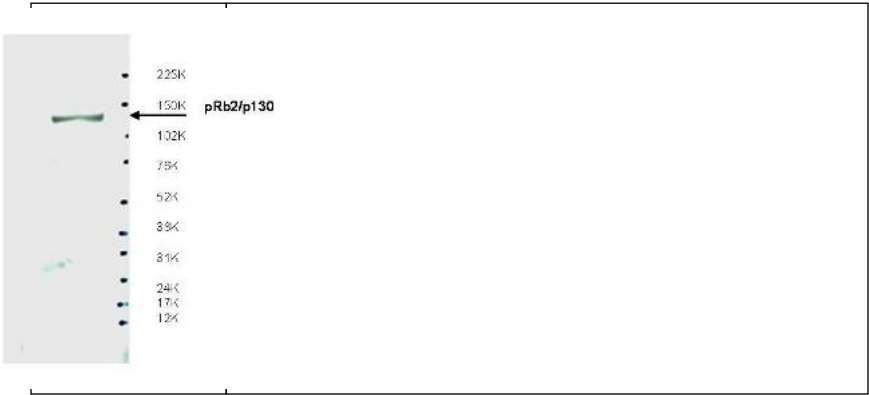
Related Products

100-401-151	Anti-Cyclin A (RABBIT) Antibody - 100-401-151
100-401-156	Anti-Cyclin E (RABBIT) Antibody - 100-401-156
100-401-161	Anti-cdk2 (RABBIT) Antibody - 100-401-161
611-1302	Anti-RABBIT IgG (H&L) (GOAT) Antibody Peroxidase Conjugated - 611-1302

Related Links

Images

1 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.



Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.