

Anti-Rb2 p130 Antibody

Catalog # ABO11199

Specification

Anti-Rb2 p130 Antibody - Product Information

ApplicationWBPrimary AccessionQ08999HostRabbitReactivityHuman, Mouse, RatClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for Retinoblastoma-like protein 2(RBL2) detection. Tested with WB in Human: Mouse: Rat.

Reconstitution Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-Rb2 p130 Antibody - Additional Information

Gene ID 5934

Other Names Retinoblastoma-like protein 2, 130 kDa retinoblastoma-associated protein, p130, Retinoblastoma-related protein 2, RBR-2, pRb2, RBL2, RB2

Calculated MW 128367 MW KDa

Application Details Western blot, 0.1-0.5 μg/ml, Human, Mouse, Rat

Subcellular Localization Nucleus.

Protein Name Retinoblastoma-like protein 2

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human Rb2 p130(1120-1139aa ENHSALLRRLQDVANDRGSH), identical to the related rat sequence and different from the related mouse sequence by one amino acid.

Purification Immunogen affinity purified.



Cross Reactivity No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Sequence Similarities Belongs to the retinoblastoma protein (RB) family.

Anti-Rb2 p130 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-Rb2 p130 Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-Rb2 p130 Antibody - Images



Anti-Rb2 p130 antibody, ABO11199, Western blottingLane 1: Rat Testis Tissue LysateLane 2: NIH313 Cell Lysate

Anti-Rb2 p130 Antibody - Background

RBL2(Retinoblastoma-like protein 2) is a protein that in humans is encoded by the RBL2 gene. It is also known as Retionblastoma-related gene(RB2), P130. Yeung et al.(1993) mapped the RBL2 gene to human chromosome 16q12.2 and rat chromosome 19, using fluorescence in situ hybridization and somatic hybrid cell analysis, respectively. Based on known syntenic relationships among human, rat and mouse, the data suggested that the mouse homolog resides on chromosome 8. Deletions of chromosome 16q have been found in several human neoplasms, including breast, ovarian, hepatic, and prostate cancers, which supports the involvement of RB2 in human cancer as a tumor suppressor gene. Kong et al.(2006)found that RBL2 and RINT1 were essential for telomere length control in human fibroblasts, with loss of either protein leading to longer telomeres. Williams et al.(2006)found that mouse fibroblasts lacking Rb were less susceptible to an oncogenic HRAS allele than wildtype cells. In contrast, p107(RBL1;) -/- and p130 -/- fibroblasts were more susceptible to HRAS-mediated transformation than wildtype cells.