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Anti-p107 Antibody

Catalog # ABO11198

Product Information

Application	WB, IHC-P
Primary Accession	P28749
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Retinoblastoma-like protein 1(RBL1) detection. Tested with WB, IHC-P in Human;Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	5933
Other Names	Retinoblastoma-like protein 1, 107 kDa retinoblastoma-associated protein, p107, pRb1, RBL1
Calculated MW	120847
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 □g/ml, Human, Rat, Mouse, By Heat Western blot, 0.1-0.5 □g/ml, Human, Mouse, Rat
Subcellular Localization	Nucleus .
Source	Eukaryota
Protein Name	Retinoblastoma-like protein 1
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 p107(1048-1068aa QENDDVLLKRLQDVVSERANH), identical to the related rat and mouse sequences.
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.

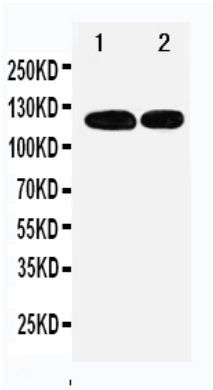
Protein Information

Name	RBL1
Function	Key regulator of entry into cell division (PubMed: 17671431). Directly involved in heterochromatin formation by maintaining overall chromatin structure and, in particular, that of constitutive heterochromatin by stabilizing histone methylation (By similarity). Recruits and targets histone methyltransferases KMT5B and KMT5C, leading to epigenetic transcriptional repression (By similarity). Controls histone H4 'Lys-20' trimethylation (By similarity). Probably acts as a transcription repressor by recruiting chromatin-modifying enzymes to promoters (By similarity). Potent inhibitor of E2F-mediated trans-activation (PubMed:8319904). May act as a tumor suppressor (PubMed:8319904).
Cellular Location	Nucleus.

Background

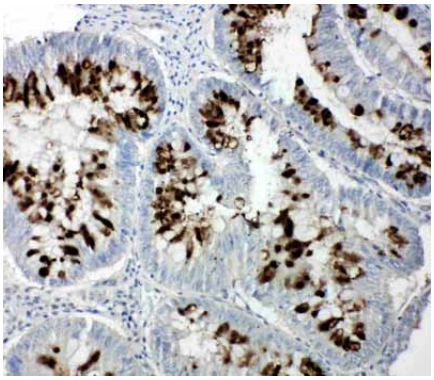
RBL1(Retinoblastoma-like 1), also known as Cullular Proteins p107, CP107 and 107, is a protein that in humans is encoded by the RBL1 gene. Ewen et al.(1991)used a partial cDNA for human p107 to map the gene to 20q11. by fluorescence in situ hybridization. Huppi et al.(1996)found that the mouse Rbl1 gene maps to the distal end of chromosome 2, as does also the E2f1 gene. The protein encoded by this gene is similar in sequence and possibly function to the product of the retinoblastoma 1(RB1) gene. The RB1 gene product is a tumor suppressor protein that appears to be involved in cell cycle regulation, as it is phosphorylated in the S to M phase transition and is dephosphorylated in the G1 phase of the cell cycle. Both the RB1 protein and the product of this gene can form a complex with adenovirus E1A protein and SV40 Large T-antigen, with the SV40 large T-antigen binding only to the unphosphorylated form of each protein. In addition, both proteins can inhibit the transcription of cell cycle genes containing E2F binding sites in their promoters. Due to the sequence and biochemical similarities with the RB1 protein, it is though that the protein encoded by this gene may also be a tumor suppressor. Two transcript variants encoding different isoforms have been found for this gene.

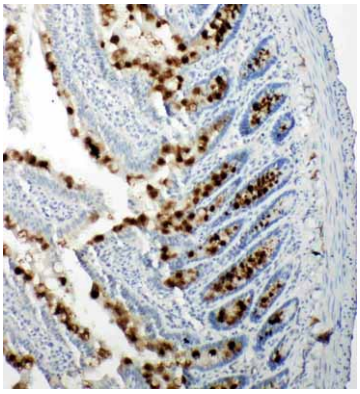
Images



Anti-p107 antibody, ABO11198, Western blottingLane 1: 239T Cell LysateLane 2: JURKAT Cell Lysate

Anti-p107 antibody, ABO11198, IHC(P)IHC(P): Human Intestinal Cancer Tissue





Anti-p107 antibody, ABO11198, IHC(P)IHC(P): Rat Intestine Tissue