10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-p107 Antibody
Catalog # ABO11198

Specification

Anti-p107 Antibody - 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.

Anti-p107 Antibody - Additional Information

Gene ID 5933

Other Names
Retinoblastoma-like protein 1, 107 kDa retinoblastoma-associated protein, p107, pRb1, RBL1

Calculated MW
120847 MW KDa

Application Details
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Rat, Mouse, By Heat
Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat

Subcellular Localization
Nucleus .

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.**

Anti-p107 Antibody - 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.

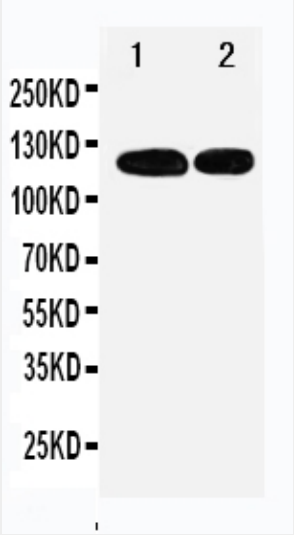
Anti-p107 Antibody - Protocols

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

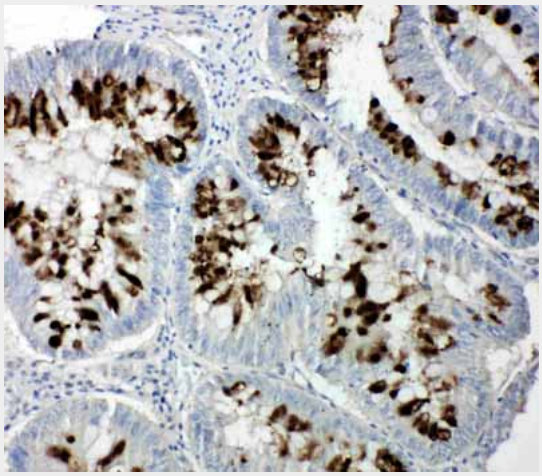
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-p107 Antibody - Images

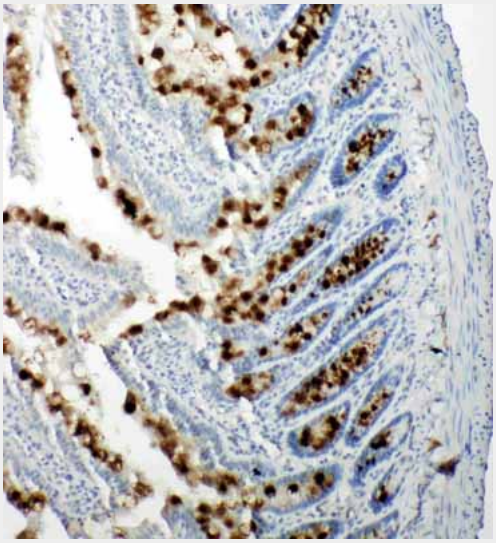
10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999



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

Anti-p107 Antibody - Background

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

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.