



## Rabbit Anti-p107 antibody

SL4184R

<b>Product Name:</b>	p107
<b>Chinese Name:</b>	视网膜母细胞瘤样蛋白p107抗体
<b>Alias:</b>	107 kDa retinoblastoma-associated protein; Cellular protein 107; Cellular protein p107; CP107; MGC40006; p107; PRB1; RBL1; RBL1_HUMAN; Retinoblastoma like protein 1; retinoblastoma-like 1 (p107); Retinoblastoma-like protein 1.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,Chicken,Dog,Cow,Horse,Rabbit,
<b>Applications:</b>	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	121kDa
<b>Cellular localization:</b>	The nucleus
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthetic peptide derived from human p107/RBL1:751-850/1068
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</b>	p107 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 thought 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.

**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 SUV420H1 and SUV420H2, 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. Forms a complex with adenovirus E1A and with SV40 large T antigen. May bind and modulate functionally certain cellular proteins with which T and E1A compete for pocket binding. May act as a tumor suppressor.

**Subunit:**

Interacts with SUV420H1, SUV420H2 and USP4 (By similarity). Component of the DREAM complex (also named LINC complex) at least composed of E2F4, E2F5, LIN9, LIN37, LIN52, LIN54, MYBL1, MYBL2, RBL1, RBL2, RBBP4, TFDP1 and TFDP2. The complex exists in quiescent cells where it represses cell cycle-dependent genes. It dissociates in S phase when LIN9, LIN37, LIN52 and LIN54 form a subcomplex that binds to MYBL2. Interacts with AATF. Interacts with KDM5A. Interacts with SV40 and JC virus large T antigens.

**Subcellular Location:**

Nucleus (Potential).

**Post-translational modifications:**

Exists in both phosphorylated and unphosphorylated forms, and T, but not E1A, binds only to the unphosphorylated form. Cell-cycle arrest properties are inactivated by phosphorylation on Thr-332, Ser-640, Ser-964 and Ser-975 by CDK4.

**Similarity:**

Belongs to the retinoblastoma protein (RB) family.

**SWISS:**

P28749

**Gene ID:**

5933

**Database links:**

[Entrez Gene: 5933](#) Human

[Entrez Gene: 19650](#) Mouse

[Entrez Gene: 680111](#) Rat

[Omid: 116957](#) Human

[SwissProt: P28749](#) Human

[SwissProt: Q64701](#) Mouse

[Unigene: 207745](#) Human

[Unigene: 244671](#) Mouse

[Unigene: 148725](#) Rat

**Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

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