Best Tools for immunology Research

RP1 rabbit pAb

Catalog No :	YT7629
Reactivity :	Human;Mouse
Applications :	WB;ELISA;IHC
Target :	RP1
Gene Name :	RP1 ORP1
Protein Name :	RP1
Human Gene Id :	6101
Human Swiss Prot No :	P56715
Mouse Gene Id :	19888
Mouse Swiss Prot No :	P56716
Immunogen :	Synthesized peptide derived from human RP1 AA range: 1330-1380
Specificity :	This antibody detects endogenous levels of RP1 at Human/Mouse
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Polyclonal, Rabbit,IgG
Dilution :	WB 1:500-2000;IHC 1:50-300; ELISA 2000-20000
Purification :	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Concentration :	1 mg/ml
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight : 237kD

Background : This gene encodes a member of the doublecortin family. The protein encoded by this gene contains two doublecortin domains, which bind microtubules and regulate microtubule polymerization. The encoded protein is a photoreceptor microtubule-associated protein and is required for correct stacking of outer segment disc. This protein and the RP1L1 protein, another retinal-specific protein, play essential and synergistic roles in affecting photosensitivity and outer segment morphogenesis of rod photoreceptors. Because of its response to in vivo retinal oxygen levels, this protein was initially named ORP1 (oxygen-regulated protein-1). This protein was subsequently designated RP1 (retinitis pigmentosa 1) when it was found that mutations in this gene cause autosomal dominant retinitis pigmentosa. Mutations in this gene also cause autosomal recessive retinitis pigmentosa. Transcript variants resulted from an alternative promoter and alternative splicings have been found, which overlap the current reference sequence and has several exons upstream and downstream of the current reference sequence. However, the biological validity and full-length nature of some variants cannot be determined at this time.[provided by RefSeq, Sep 2010],

Function : disease:Defects in RP1 are the cause of retinitis pigmentosa type 1 (RP1) [MIM:180100]. RP leads to degeneration of retinal photoreceptor cells. Patients typically have night vision blindness and loss of midperipheral visual field. As their condition progresses, they lose their far peripheral visual field and eventually central vision as well.,function:Could have a role in the differentiation of photoreceptor cells.,online information:Retina International's Scientific Newsletter,online information:Retinal information network,similarity:Contains 2 doublecortin domains.,tissue specificity:Expressed in retina. Not expressed in heart, brain, placenta, lung, liver, skeletal muscle, kidney, spleen and pancreas.,

Subcellular Location : Cytoplasm, cytoskeleton, cilium axoneme . Cell projection, cilium, photoreceptor outer segment . Specifically localized in the connecting cilia of rod and cone photoreceptors.

Expression : Expressed in retina. Not expressed in heart, brain, placenta, lung, liver, skeletal muscle, kidney, spleen and pancreas.

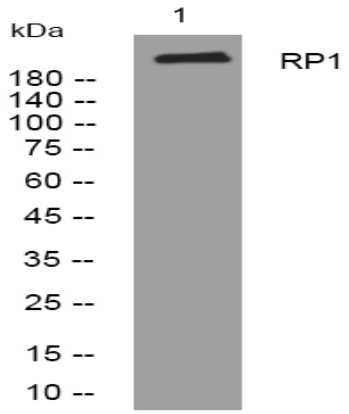
Sort : 14584

No4 : 1

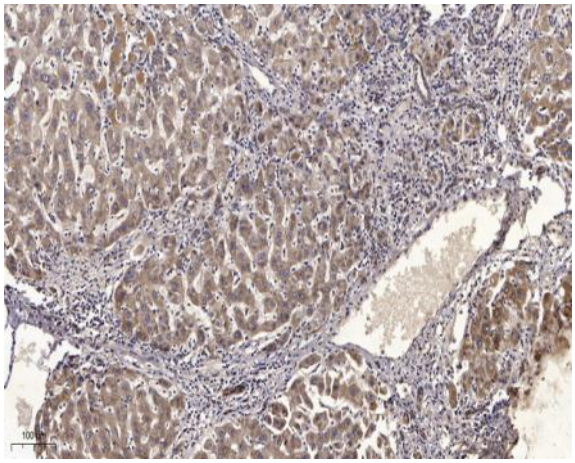
Host : Rabbit

Modifications : Unmodified

Products Images



Western blot analysis of lysates from 293T cells, primary antibody was diluted at 1:1000, 4°over night



Immunohistochemical analysis of paraffin-embedded human liver cancer. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).