



RP1 mouse mAb

Catalog No	YP-mAb-12263
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	RP1 ORP1
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	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	GP91 2;Mitogenic oxidase (pyridine nucleotide dependent superoxide generating);Mitogenic oxidase 1;MOX-1;MOX1;NADH/NADPH mitogenic oxidase subunit P65 MOX;NADH/NADPH mitogenic oxidase subunit P65-MOX; NADPH oxidase 1;NADPH oxidase 1 variant NOH 1L;NADPH oxidase homolog 1;NOH 1;NOH-1;NOH1;NOX-1;Nox1;NOX1_HUMAN;RP1 146H21.1;RP1;RP1 ORP1
Observed Band	
Calculated Molecular Weight	
Cell Pathway	Cytoplasm, cytoskeleton, cilium axoneme . Cell projection, cilium, photoreceptor outer segment . Specifically localized in the connecting cilia of rod and cone photoreceptors.
Tissue Specificity	Expressed in retina. Not expressed in heart, brain, placenta, lung, liver, skeletal muscle, kidney, spleen and pancreas.
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.,

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],

matters needing attention

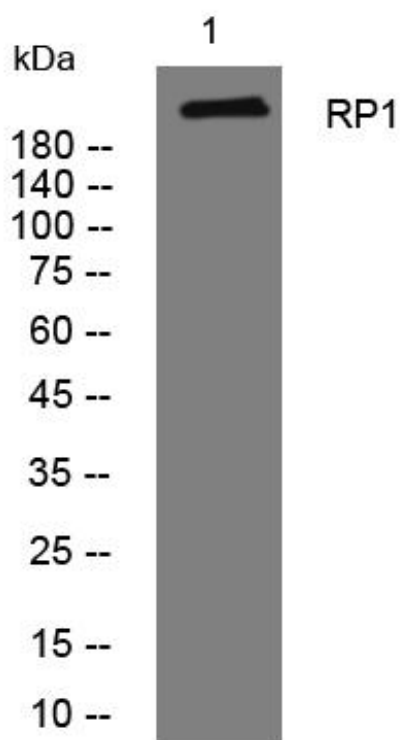
Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



Products Images



Western Blot analysis of various cells using RP1 mouse mAb