## RPE65 Rabbit mAb

Catalog No: #49495

Package Size: #49495-1 50ul #49495-2 100ul



Orders: order@signalwayantibody.com Support: tech@signalwayantibody.com

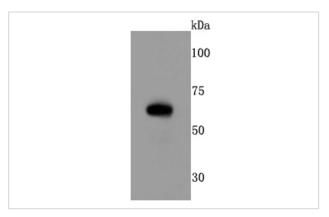
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|-----------------------|---|
| Product Name          | RPE65 Rabbit mAb  |
| Host Species          | Recombinant Rabbit  |
| Clonality             | Monoclonal antibody   |
| Clone No.             | JM61-51   |
| Purification          | ProA affinity purified  |
| Applications          | WB, IP  |
| Species Reactivity    | Hu, Ms, Rt  |
| Immunogen Description | recombinant protein   |
| Other Names           | All-trans-retinyl-palmitate hydrolase antibody LCA 2 antibody LCA2 antibody Leber congenital amaurosis  |
|                       | antibody mRPE 65 antibody mRPE65 antibody p63 antibody rd 12 antibody rd12 antibody Retinal pigment     |
|                       | epithelium specific 61 kDa protein antibody Retinal pigment epithelium specific 65 kDa protein antibody |
|                       | Retinal pigment epithelium specific protein antibody Retinal pigment epithelium specific protein 65kDa  |
|                       | antibody Retinal pigment epithelium-specific 65 kDa protein antibody Retinitis pigmentosa 20 antibody   |
|                       | Retinoid isomerohydrolase antibody Retinol isomerase antibody RP 20 antibody RP20 antibody RPE 65       |
|                       | antibody RPE65 antibody RPE65_HUMAN antibody sRPE 65 antibody sRPE65 antibody                           |
| Accession No.         | Swiss-Prot#:Q16518  |
| Calculated MW         | 61 kDa  |
| Formulation           | 1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.                                    |
| Storage               | Store at -20°C  |
|                       |   |

# Application Details

WB: 1:1,000-1:2,000 IP: 1:10-1:50

### **Images**



Western blot analysis of RPE65 on mouse eyeball cells lysates using anti-RPE65 antibody at 1/500 dilution.

#### Background

The retinal pigment epithelium (RPE) is a monolayer simple epithelium in proximity to the outer surface of the retinal photoreceptor cells. Retinal pigment epithelium-specific protein (RPE65) is a 65kDa protein belonging to the beta-carotene dioxygenase family. This protein is important in 11-cis retinal production as well as in visual pigment regeneration. RPE65 is attached to the membrane by a lipid anchor when palmitoylated (membrane form) and soluble when unpalmitoylated. The soluble form of the protein binds vitamin A. Defects in RPE65 causes autosomal dominant retinitis pigmentosa and/or Leber congenital amaurosis type 2.

#### References

1. Zhou J et al. Correlations between Photodegradation of Bisretinoid Constituents of Retina and Dicarbonyl Adduct Deposition. J Biol Chem 290:27215-27 (2015). 2. Sukseree S et al. Tyrosinase-Cre-Mediated Deletion of the Autophagy Gene Atg7 Leads to Accumulation of the RPE65 Variant M450 in the Retinal Pigment Epithelium of C57BL/6 Mice. PLoS One 11:e0161640 (2016).

#### **Published Papers**

el at., Suppressing endoplasmic reticulum stress-related autophagy attenuates retinal light injury. In Aging (Albany NY) on 2020 Aug 28 by Jing-Yao Song, Bin Fan,et al..PMID: 32858529, , (2020)

PMID:32858529

Note: This product is for in vitro research use only and is not intended for use in humans or animals.