

## RPE65 Rabbit mAb

Catalog No: #49495



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

Orders: order@signalwayantibody.com

Support: tech@signalwayantibody.com

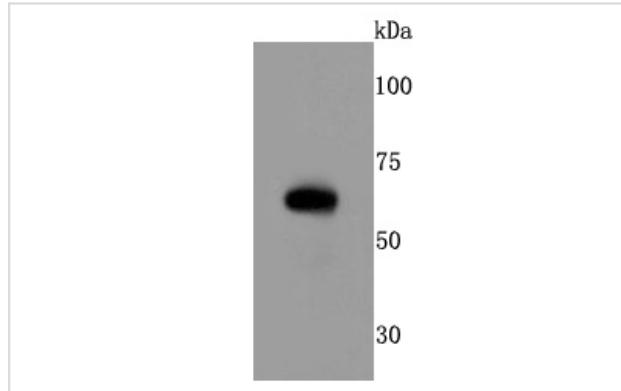
## Description

|                       |   |
|-----------------------|---|
| 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    | Human;Mouse;Rat   |
| Immunogen Description | recombinant protein   |
| Conjugates            | Unconjugated  |
| 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.