

## Product datasheet

# Anti-RPE65 antibody [EPR7024(N)] - C-terminal ab175936

Recombinant RabMAb

★★★★★ [2 Abreviews](#) [1 References](#) [3 Images](#)

### Overview

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<b>Product name</b>	Anti-RPE65 antibody [EPR7024(N)] - C-terminal
<b>Description</b>	Rabbit monoclonal [EPR7024(N)] to RPE65 - C-terminal
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, IP <b>Unsuitable for:</b> ICC/IF or IHC-P
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human
<b>Immunogen</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	Mouse eyeball, rat eyeball and Y79 lysates
<b>General notes</b>	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"><li>- High batch-to-batch consistency and reproducibility</li><li>- Improved sensitivity and specificity</li><li>- Long-term security of supply</li><li>- Animal-free production</li></ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p>

### Properties

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<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture supernatant
<b>Purity</b>	Tissue culture supernatant
<b>Clonality</b>	Monoclonal

**Clone number**                      EPR7024(N)

**Isotype**                                IgG

## Applications

**The Abpromise guarantee**        Our **Abpromise guarantee** covers the use of ab175936 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB	★★★★★ (2)	1/1000 - 1/5000. Predicted molecular weight: 61 kDa.
IP		1/10 - 1/100.

**Application notes**                    Is unsuitable for ICC/IF or IHC-P.

## Target

**Function**                               Plays important roles in the production of 11-cis retinal and in visual pigment regeneration. The soluble form binds vitamin A (all-trans-retinol), making it available for LRAT processing to all-trans-retinyl ester. The membrane form, palmitoylated by LRAT, binds all-trans-retinyl esters, making them available for IMH (isomerohydrolase) processing to all-cis-retinol. The soluble form is regenerated by transferring its palmitoyl groups onto 11-cis-retinol, a reaction catalyzed by LRAT. The enzymatic activity is linearly dependent of the expression levels and membrane association.

**Tissue specificity**                    Retinal pigment epithelium specific.

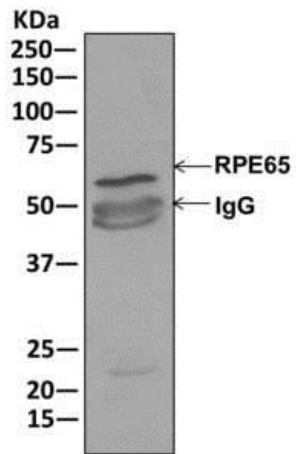
**Involvement in disease**            Defects in RPE65 are the cause of Leber congenital amaurosis type 2 (LCA2) [MIM:204100]. LCA designates a clinically and genetically heterogeneous group of childhood retinal degenerations, generally inherited in an autosomal recessive manner. Affected infants have little or no retinal photoreceptor function as tested by electroretinography. LCA represents the most common genetic cause of congenital visual impairment in infants and children. Defects in RPE65 are the cause of retinitis pigmentosa type 20 (RP20) [MIM:613794]. 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. RP20 inheritance is autosomal dominant.

**Sequence similarities**                Belongs to the carotenoid oxygenase family.

**Post-translational modifications**   Palmitoylation by LRAT regulates ligand binding specificity; the palmitoylated form (membrane form) specifically binds all-trans-retinyl-palmitate, while the soluble unpalmitoylated form binds all-trans-retinol (vitamin A).

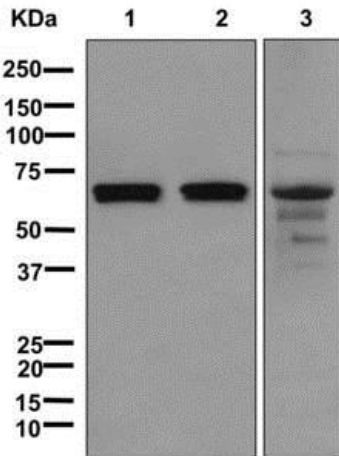
**Cellular localization**                Cytoplasm. Cell membrane. Attached to the membrane by a lipid anchor when palmitoylated (membrane form), soluble when unpalmitoylated.

## Images



Western blot analysis on immunoprecipitation pellet from mouse eyeball lysate labeling RPE65 with ab175936 at 1/10 dilution

Immunoprecipitation - Anti-RPE65 antibody [EPR7024(N)] - C-terminal (ab175936)



**All lanes :** Anti-RPE65 antibody [EPR7024(N)] - C-terminal (ab175936) at 1/1000 dilution

**Lane 1 :** Mouse eyeball lysate

**Lane 2 :** Rat eyeball lysate

**Lane 3 :** Y79 lysate

Lysates/proteins at 10 µg per lane.

**Predicted band size:** 61 kDa

Western blot - Anti-RPE65 antibody [EPR7024(N)] - C-terminal (ab175936)

### Why choose a recombinant antibody?



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

Anti-RPE65 antibody [EPR7024(N)] - C-terminal  
(ab175936)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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