Leader in Biomolecular Solutions for Life Science

RPE65 Rabbit mAb

Catalog No.: A9615 Recombinant 2 Publications



Basic Information

Observed MW

70kDa

Calculated MW

61kDa

Category

SMab Recombinant Monoclonal Antibody

Applications

WB,IHC-P,IF/ICC,ELISA

Cross-Reactivity

Mouse,Rat

CloneNo number

ARC1659

Background

The protein encoded by this gene is a component of the vitamin A visual cycle of the retina which supplies the 11-cis retinal chromophore of the photoreceptors opsin visual pigments. It is a member of the carotenoid cleavage oxygenase superfamily. All members of this superfamily are non-heme iron oxygenases with a seven-bladed propeller fold and oxidatively cleave carotenoid carbon:carbon double bonds. However, the protein encoded by this gene has acquired a divergent function that involves the concerted O-alkyl ester cleavage of its all-trans retinyl ester substrate and all-trans to 11-cis double bond isomerization of the retinyl moiety. As such, it performs the essential enzymatic isomerization step in the synthesis of 11-cis retinal. Mutations in this gene are associated with early-onset severe blinding disorders such as Leber congenital.

Recommended Dilutions

WB	1:500 - 1:1000
IHC-P	1:50 - 1:200
IF/ICC	1:50 - 1:200

Immunogen Information

Gene ID	Swiss Prot
6121	Q16518

Immunogen

A synthetic peptide corresponding to a sequence within amino acids 400-500 of human RPE65 (Q16518).

Synonyms

p63; BCO3; LCA2; RP20; rd12; mRPE65; sRPE65; RPE65

Contact

www.abclonal.com

Product Information

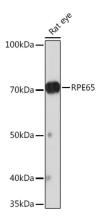
SourceIsotypePurificationRabbitIgGAffinity purification

Storage

Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS with 0.02% sodium azide, 0.05% BSA, 50% glycerol, pH7.3.

Validation Data



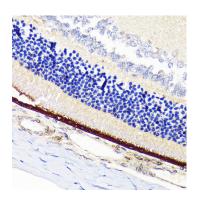
Western blot analysis of extracts of Rat eye, using RPE65 Rabbit mAb (A9615) at 1:1000 dilution. Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25µg per lane.

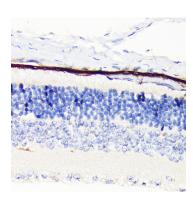
Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

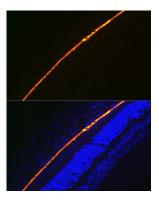
Exposure time: 3min.



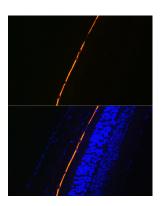
Immunohistochemistry analysis of paraffinembedded rat retina using RPE65 Rabbit mAb (A9615) at dilution of 1:100 (40x lens).Perform microwave antigen retrieval with 10 mM Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemistry analysis of paraffinembedded mouse retina using RPE65 Rabbit mAb (A9615) at dilution of 1:100 (40x lens).Perform microwave antigen retrieval with 10 mM Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunofluorescence analysis of rat eye using RPE65 Rabbit mAb (A9615) at dilution of 1:100 (40x lens). Blue: DAPI for nuclear staining.



Immunofluorescence analysis of mouse eye using RPE65 Rabbit mAb (A9615) at dilution of 1:100 (40x lens). Blue: DAPI for nuclear staining.