

Product datasheet for TA381025S

RPE65 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	ELISA, ICC/IF, WB
Recommended Dilution:	WB, 1:1000 - 1:5000 IF/ICC, 1:50 - 1:200 ELISA, Recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements.
Reactivity:	Human, Mouse, Rat
Modifications:	Unmodified
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Formulation:	Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH 7.3.
Concentration:	lot specific
Purification:	Affinity purification
Conjugation:	Unconjugated
Storage:	Store at -20°C. Avoid freeze / thaw cycles.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	61kDa
Gene Name:	retinal pigment epithelium-specific protein 65kDa
Database Link:	Entrez Gene 6121 Human Q16518

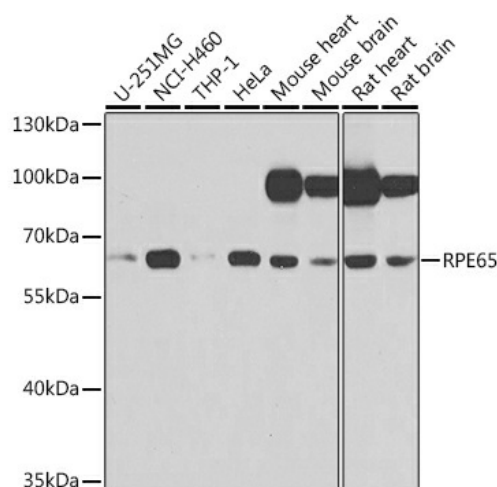
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Background:

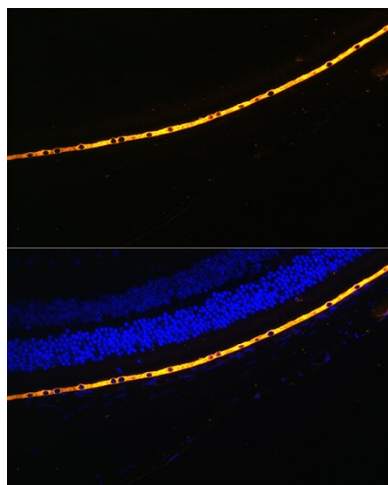
The protein encoded by this gene is a component of the vitamin A visual cycle of the retina which supplies the 11-cis retinal chromophore of the photoreceptors opsin visual pigments. It is a member of the carotenoid cleavage oxygenase superfamily. All members of this superfamily are non-heme iron oxygenases 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.

Synonyms:

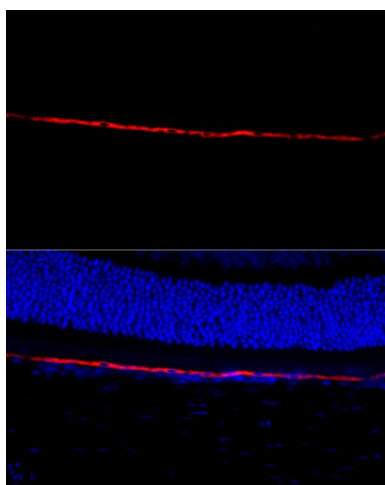
LCA2; mRPE65; p63; rd12; RP20; sRPE65

Product images:


Western blot analysis of lysates from Mouse eye



Perform microwave antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IF staining protocol. Immunofluorescence analysis of paraffin-embedded mouse retina using RPE65 Rabbit pAb ([TA381025]) at dilution of 1:300 (40x lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



Perform microwave antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IF staining protocol. Immunofluorescence analysis of paraffin-embedded rat retina using RPE65 Rabbit pAb ([TA381025]) at dilution of 1:300 (40x lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.