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Product datasheet for CF815232

RPE65 Mouse Monoclonal Antibody [Clone ID: OTI6D6]

Product data:

Product Type:	Primary Antibodies
Clone Name:	OTI6D6
Applications:	WB
Recommended Dilution:	WB 1:500-1:5000
Reactivity:	Human, Mouse
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Human recombinant protein fragment of human RPE65 (NP_000320) produced in E.coli.
Formulation:	Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)
Reconstitution Method:	For reconstitution, we recommend adding 100uL distilled water to a final antibody concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)
Purification:	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
Conjugation:	Unconjugated
Storage:	Shipped at -20°C or with ice packs, Upon delivery store at -20°C. Dilute in PBS(pH7.3) if necessary. Stable for 12 months from date of receipt. Avoid repeated freeze-thaws.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	61.4 kDa
Gene Name:	retinoid isomerohydrolase RPE65
Database Link:	NP_000320 Entrez Gene 19892 MouseEntrez 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. [provided by RefSeq, Oct 2017]

Synonyms: BCO3; LCA2; mRPE65; p63; rd12; RP20; sRPE65

Protein Families: Druggable Genome

Protein Pathways: Retinol metabolism

Product images:

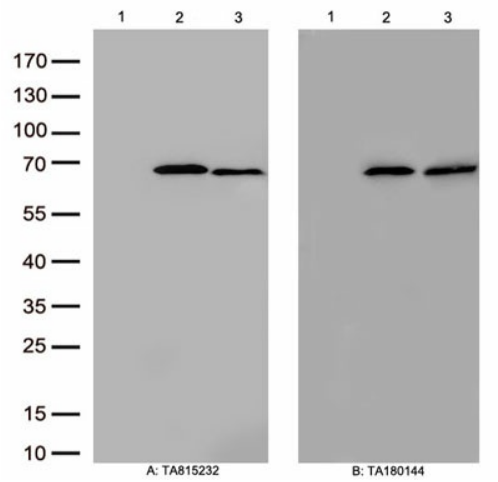
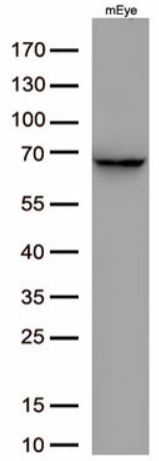


Figure A, Western blot analysis of overexpressed lysates(15ug per lane) from HEK293T cells transfected with empty plasmid ([PS100001], lane 1) , human RPE65 plasmid ([RC210433], lane 2), mouse RPE65 plasmid ([MR223598], lane 3) using anti-ADAR antibody [TA815232] (1:5000). Figure B, Western blot analysis of the same samples as figure A with anti-DDK antibody ([TA180144], 1:1000)



Western blot analysis of extracts (50ug) from mouse eye lysate by using anti-RPE65 monoclonal antibody([TA815232], 1:500)