

# Recombinant Full Length Human RPE65 Protein, DYKDDDDK-tagged

**Cat. No.** RPE65-02H    **Lot. No.** (See product label)

## SPECIFICATION

**Product Overview**      Recombinant protein from the full-length sequence of homo sapiens RPE65, retinoid isomerohydrolase (RPE65) (NM\_000329), with a DYKDDDDK tag was expressed in human cells.

**Species**      Human

**Source**      Human Cells

**Description**      This gene encodes a protein which is located in the retinal pigment epithelium and is involved in the production of 11-cis retinal and in visual pigment regeneration. There are two forms of this protein, a soluble form called sRPE65, and a palmitoylated, membrane-bound form known as mRPE65. mRPE65 serves as the palmitoyl donor for lecithin retinol acyl transferase (LRAT), the enzyme that catalyzes the vitamin A to all trans retinol step of the chromophore regeneration process. Both mRPE65 and sRPE65 also serve as regulatory proteins, with the ratio and concentrations of these molecules playing a role in the inhibition of 11-cis retinal synthesis. Mutations in this gene have been associated with Leber congenital amaurosis type 2 (LCA2) and retinitis pigmentosa.

**Molecular Mass**      60.8 kDa

**Endotoxin**      Endotoxin level is < 0.1 ng/μg of protein (<1 EU/μg)

**Purity**      > 90% by SDS-PAGE gel and Coomassie Blue staining

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<b>Applications</b>	Antigens, Western, ELISA and other in vitro binding or in vivo functional assays, and protein-protein interaction studies; For research & development use only!
<b>Storage Buffer</b>	Purified protein formulated in a sterile solution of TBS buffer, pH7.4, without any preservatives
<b>GENE INFORMATION</b>	
<b>Gene Name</b>	RPE65 retinoid isomerohydrolase RPE65 [ Homo sapiens (human) ]
<b>Official Symbol</b>	RPE65
<b>Synonyms</b>	RPE65; retinoid isomerohydrolase RPE65; p63; BCO3; LCA2; RP20; rd12; mRPE65; sRPE65; retinoid isomerohydrolase; BCO family, member 3 RBP-binding membrane protein; RPE65, retinoid isomerohydrolase; all-trans-retinyl-palmitate hydrolase; lutein isomerase; meso-zeaxanthin isomerase; retinal pigment epithelium specific protein 65; retinal pigment epithelium-specific 65 kDa protein; retinal pigment epithelium-specific protein 65kDa; retinitis pigmentosa 20 (autosomal recessive); retinol isomerase; EC 3.1.1.64; EC 5.3.3.22
<b>Gene ID</b>	6121
<b>mRNA Refseq</b>	NM_000329
<b>Protein Refseq</b>	NP_000320
<b>MIM</b>	180069
<b>UniProt ID</b>	Q16518

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