

**PRODUCT INFORMATION**

<b>Target</b>	RPE65
<b>Synonyms</b>	BCO3; LCA2; mRPE65; p63; rd12; RP20; sRPE65
<b>Description</b>	Recombinant protein of human retinal pigment epithelium-specific protein 65kDa (RPE65)
<b>Delivery</b>	1 week
<b>Uniprot ID</b>	Q16518
<b>Expression Host</b>	HEK293T
<b>Tag</b>	C-Myc/DDK
<b>Molecular Characterization</b>	N/A
<b>Molecular Weight</b>	60.8 kDa
<b>Purity</b>	> 80% as determined by SDS-PAGE and Coomassie blue staining
<b>Formulation &amp; Reconstitution</b>	25 mM Tris.HCl, pH 7.3, 100 mM glycine, 10% glycerol
<b>Storage &amp; Shipping</b>	Store at -80°C.
<b>Background</b>	<p>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]</p>
<b>Usage</b>	Research use only
<b>Conjugate</b>	Unconjugated

