



# Recombinant Human Retinoid isomerohydrolase (RPE65)

<b>Product Code</b>	CSB-EP624103HU-B
<b>Abbreviation</b>	RPE65
<b>Storage</b>	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
<b>Uniprot No.</b>	Q16518
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Homo sapiens (Human)
<b>Purity</b>	>85% (SDS-PAGE)
<b>Sequence</b>	SIQVEHPAG GYKCLFETVE ELSSPLTAHV TGRIPLWLTG SLLRCGPGLF EVGSEPFYHL FDGQALLHKF DFKEGHVTYH RRFIRTDAYV RAMTEKRIVI TEFGTCAFPD PCKNIFSRFF SYFRGVEVTD NALVNVYPVG EDYYACTETN FITKINPETL ETIKQVDLCN YVSVNGATAH PHIENDGTVY NIGNCFGKNF SIAYNIVKIP PLQADKEDPI SKSEIVVQFP CSDRFKPSYV HSFGLTPNYI VVFVETPVKIN LFKFLSSWSL WGANYMDCFE SNETMGVWLH IADKKRKKYL NNKYRTSPFN LFHHINTYED NGFLIVDLCC WKGFEFVYNY LYLANLRENW EEVKKNARKA PQPEVRRYVL PLNIDKADTG KNLVTLPTTT ATAILCSDET IWLEPEVLFS GPRQAFEFPPQ INYQKYCGKP YTYAYGLGLN HFVPDRLCKL NVTKKETWVW QEPDSYPSEP IFVSHPDAL EDDGVVLSVV VSPGAGQKPA YLLILNAKDL SEVARAEVEI NIPVTFHGLF KKS
<b>Source</b>	E.coli
<b>Target Names</b>	RPE65
<b>Protein Names</b>	Recommended name: Retinoid isomerohydrolase EC= 3.1.1.64 Alternative name(s): All-trans-retinyl-palmitate hydrolase Retinal pigment epithelium-specific 65 kDa protein Retinol isomerase
<b>Expression Region</b>	2-533
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
<b>Tag Info</b>	Tag type will be determined during the manufacturing process.
<b>Protein Length</b>	Full Length of Mature Protein
<b>Target Details</b>	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.

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**Reconstitution**

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

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**Shelf Life**

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