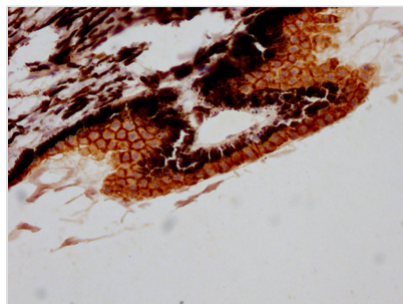




RPE65 Recombinant Monoclonal Antibody

| | |
|----------------------------|---|
| Product Code | CSB-RA212530A0HU |
| Storage | Upon receipt, store at -20°C or -80°C. Avoid repeated freeze. |
| Uniprot No. | Q16518 |
| Immunogen | A synthesized peptide derived from human RPE65 |
| Species Reactivity | Human |
| Tested Applications | ELISA, IHC; Recommended dilution: IHC:1:50-1:200 |
| Relevance | Plays important roles in the production of 11-cis retinal and in visual pigment regeneration. The soluble form binds vitamin A (all-trans-retinol), making it available for LRAT processing to all-trans-retinyl ester. The membrane form, palmitoylated by LRAT, binds all-trans-retinyl esters, making them available for IMH (isomerohydrolase) processing to all-cis-retinol. The soluble form is regenerated by transferring its palmitoyl groups onto 11-cis-retinol, a reaction catalyzed by LRAT. The enzymatic activity is linearly dependent of the expression levels and membrane association. |
| Form | Liquid |
| Conjugate | Non-conjugated |
| Storage Buffer | Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. |
| Purification Method | Affinity-chromatography |
| Isotype | Rabbit IgG |
| Clonality | Monoclonal |
| Product Type | Recombinant Antibody |
| Immunogen Species | Homo sapiens (Human) |
| Research Area | Neuroscience; Cancer; Tags & Cell Markers; Metabolism; Signal transduction |
| Gene Names | RPE65 |
| Clone No. | 7B10 |

Image



IHC image of CSB-RA212530A0HU diluted at 1:100 and staining in paraffin-embedded human eye tissue performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4? overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.



Description

RPE65 is an isomerohydrolase expressed in the retinal pigment epithelium. It is important for the regeneration of the visual pigment required for both rod and cone vision. RPE65 is a retinoid isomerase that converts all-trans retinyl esters to 11-cis retinol and is engaged in the retinoid cycle, which continuously regenerates 11-cis retinal, the chromophore of rhodopsin. RPE65 is abundantly expressed in the retinal pigment epithelium (RPE) and is essential for optimal vision. Mutations in RPE65 are associated with inherited retinal diseases such as retinitis pigmentosa (RP) and Leber congenital amaurosis (LCA).

The RPE65 antibody genes were cloned from B cells that were derived from immunized animals with A synthesized peptide derived from human RPE65 and then introduced into the plasma vectors, which were transfected into mammalian cell lines for up-scaling expression. The product was purified by A synthesized peptide derived from human RPE65 to obtain the recombinant antibody against RPE65. This recombinant RPE65 antibody is reactive with the RPE65 protein from Human. It is recommended for use in the ELISA, IHC.