



Anti-RPE65 polyclonal antibody (DPAB-DC2723)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

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| Antigen 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. |
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| Immunogen | A synthetic peptide corresponding to human RPE65. The sequence is C-EVKKNARKAPQPE |
| Source/Host | Goat |
| Species Reactivity | Rat |
| Purification | Antigen affinity purification |
| Conjugate | Unconjugated |
| Applications | WB (Tissue lysate), ELISA, |
| Format | Liquid |
| Concentration | 0.5 mg/mL |
| Size | 100 µg |
| Buffer | In Tris saline, pH 7.3 (0.5% BSA, 0.02% sodium azide) |
| Preservative | 0.02% Sodium Azide |

Storage

Store at -20°C. Aliquot to avoid repeated freezing and thawing.

GENE INFORMATION

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| Gene Name | RPE65 retinal pigment epithelium-specific protein 65kDa [Homo sapiens (human)] |
| Official Symbol | RPE65 |
| Synonyms | RPE65; retinal pigment epithelium-specific protein 65kDa; BCO3; LCA2; RP20; rd12; mRPE65; sRPE65; retinoid isomerohydrolase; p63; retinol isomerase; BCO family, member 3; RBP-binding membrane protein; all-trans-retinyl-palmitate hydrolase; retinitis pigmentosa 20 (autosomal recessive); retinal pigment epithelium-specific 65 kDa protein; |
| Entrez Gene ID | 6121 |
| Protein Refseq | NP_000320 |
| UniProt ID | Q16518 |
| Chromosome Location | 1p31 |
| Pathway | Disease; Retinol metabolism; Signal Transduction; Visual phototransduction |
| Function | all-trans-retinyl-ester hydrolase, 11-cis retinol forming activity; all-trans-retinyl-palmitate hydrolase, 11-cis retinol forming activity; metal ion binding; retinal isomerase activity |