

Product datasheet for **TP310433L**

RPE65 (NM_000329) Human Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant protein of human retinal pigment epithelium-specific protein 65kDa (RPE65), 1 mg
Species:	Human
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>RC210433 representing NM_000329 Red =Cloning site Green =Tags(s)

MSIQVEHPAGGYKFLFETVEELSSPLTAHVTGRIPLWLTGSLRCGPGLEFVGVSEPFYHLFDGQALLHKF
DFKEGHVTYHRRFIRTDAYVRAMTEKRIVITEFGTCAFPDPCKNIFSRFFSYFRGVEVTDNALVNVYPVG
EDYYACTETNFITKINPETLETIKQVDLCNYVSVNGATAHPHIENDGTVYNIGNCFGKNFSIAYNIVKIP
PLQADKEDPISKSEIVVQFPCSDRFKPSYVHSFGLTPNYIVFVETPVKINLFLKSSWSLWGANYMDCFE
SNETMGVWLHIADKKRKKYLNNKYRTSPFNLFHHINTYEDNGFLIVDLCCWKGFEFVYNYLYLANLRENW
EEVKKNARKAPQPEVRRYVLPNIDKADTGKNLVTLPNTTATAILCSDETIWLEPEVLFSGPRQAFEPQ
INYQKYCGKPYTYAYGLGLNHFPDRLCKLNVTKETWWVQEPDSEPIFVSHPPDALEEDDGVVLSV
VSPGAGQKPAYLLILNAKDLSEVARAEVINIPVTFHGLFKKS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

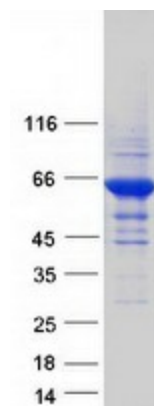
Tag:	C-Myc/DDK
Predicted MW:	60.8 kDa
Concentration:	>0.1 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
Preparation:	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C.



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Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	NP_000320
Locus ID:	6121
UniProt ID:	Q16518
RefSeq Size:	2608
Cytogenetics:	1p31.3
RefSeq ORF:	1599
Synonyms:	BCO3; LCA2; mRPE65; p63; rd12; RP20; sRPE65
Summary:	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]
Protein Families:	Druggable Genome
Protein Pathways:	Retinol metabolism

Product images:



Coomassie blue staining of purified RPE65 protein (Cat# [TP310433]). The protein was produced from HEK293T cells transfected with RPE65 cDNA clone (Cat# [RC210433]) using MegaTran 2.0 (Cat# [TT210002]).