

Product datasheet for PH310433

RPE65 (NM_000329) Human Mass Spec Standard

Product data:

Product Type:	Mass Spec Standards
Description:	RPE65 MS Standard C13 and N15-labeled recombinant protein (NP_000320)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC210433
Predicted MW:	61.4 kDa
Protein Sequence:	>RC210433 representing NM_000329 Red=Cloning site Green=Tags(s)

MSIQVEHPAGGYKLFETVEELSSPLTAHVTRGRIPLWLTGSLLRCPGLFEVGSEPFYHLFDGQALLHKF
DFKEGHVYHRRFIRTDAYVRAMTEKRIVITEFGTCAFPDCKNIFSRFFSYFRGVEVDNALVNVYPVG
EDYYACTETNFITKINPETLETIKQVDLCNYVSVNGATAHPHIENDGTVYNIIGNCFGKNFSIAYNIVKIP
PLQADKEDPISKSEIVVQFPCSDRFKPSYVHSFGLTPNYIVFVETPVKINLKFLLSSWSLWGANYMDCFE
SNETMGVWLHIADKRRKKYLNNKYRTSPFNLFHHINTYEDNGFLIVDLCCWKGFEFVYNYLYLANLRENW
EEVKKNARKAPQPEVRRYVPLNIDKADTGKNLVTLPNTTATAILCSDETIWLEPEVLFSGPRQAFEPQ
INYQKYCGKPYTYAYGLGLNHFVPDRLCKLNVKTKETWVWQEPDSYPSEPIFVSHPDAL EDDGVVLSV
VSPGAGQKPAYLLILNAKDLSEVARAEVEINIPVTFHGLFKKS

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Tag:	C-Myc/DDK
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- ¹³ C ₆ , ¹⁵ N ₄]-L-Arginine and [U- ¹³ C ₆ , ¹⁵ N ₂]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.
RefSeq:	NP_000320
RefSeq Size:	2608
RefSeq ORF:	1599



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Synonyms: BCO3; LCA2; mRPE65; p63; rd12; RP20; sRPE65

Locus ID: 6121

UniProt ID: [Q16518](#)

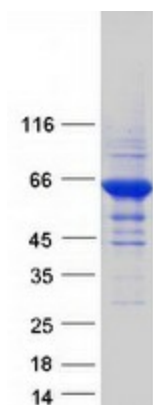
Cytogenetics: 1p31.3

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]).