

Product datasheet for **MR223598L4V**

Rpe65 (NM_029987) Mouse Tagged ORF Clone Lentiviral Particle

Product data:

Product Type:	Lentiviral Particles
Product Name:	Rpe65 (NM_029987) Mouse Tagged ORF Clone Lentiviral Particle
Symbol:	Rpe65
Synonyms:	65kDa; A930029L06Rik; LCA2; Mord1; rd12; RP20
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
Tag:	mGFP
ACCN:	NM_029987
ORF Size:	1599 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(MR223598).
OTI Disclaimer:	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info</p>
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
RefSeq:	NM_029987.2 , NP_084263.2
RefSeq Size:	1862 bp
RefSeq ORF:	1602 bp



[View online »](#)

Locus ID: 19892

UniProt ID: [Q91ZQ5](#)

Cytogenetics: 3 82.52 cM

Gene Summary: Critical isomerohydrolase in the retinoid cycle involved in regeneration of 11-cis-retinal, the chromophore of rod and cone opsins. Catalyzes the cleavage and isomerization of all-trans-retinyl fatty acid esters to 11-cis-retinol which is further oxidized by 11-cis retinol dehydrogenase to 11-cis-retinal for use as visual chromophore (PubMed:15765048, PubMed:9843205, PubMed:23407971, PubMed:28500718). Essential for the production of 11-cis retinal for both rod and cone photoreceptors (PubMed:17251447). Also capable of catalyzing the isomerization of lutein to meso-zeaxanthin an eye-specific carotenoid. 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 (By similarity).[UniProtKB/Swiss-Prot Function]