

## Product datasheet for **RC200842**

### RPE (NM\_199229) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	RPE (NM_199229) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	RPE
Synonyms:	RPE2-1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC200842 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCGTCGGGCTGCAAGATTGGCCCGTCCATCCTCAACAGCGACCTGGCCAATTTAGGGGCCGAGTGCC  
TCCGGATGCTAGACTCTGGGGCCGATTATCTGCACCTGGACGTAATGGACGGGCATTTTGTCCCAACAT  
CACCTTTGGTCACCCTGTGGTAGAAAGCCTTCGAAAGCAGCTAGGCCAGGACCCTTTCTTTGACATGCAC  
ATGATGGTGTCCAAGCCAGAACAGTGGTAAAGCCAATGGCTGTAGCAGGAGCCAATCAGTACACCTTTC  
ATCTCGAGGCTACTGAGAACCCAGGGGCTTTGATTAAGACATTCGGGAGAAATGGGATGAAGTTGGCCT  
TGCCATCAAACCAGGAACCTCAGTTGAGTATTTGGCACCATGGGCTAATCAGATAGATATGCCTTGGTT  
ATGACAGTGGAACCGGGTTTGGAGGGCAGAAATTCATGGAAGATATGATGCCAAAGTTCACTGGTTGA  
GGACCCAGTTCCCATCTTTGGATATAGAGGTGCGATGGTGGAGTAGGTCTGACACTGTCCATAAATGTGC  
AGAGGCAGGAGCTAACATGATTGTCTGGCAGTGCTATTATGAGGAGTGAAGACCCAGATCTGTGATC  
AATCTATTAAGAAATGTTTGCTCAGAAGCTGCTCAGAAACGTTCTTGTATCGG

**ACGCGT**ACGCGGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC200842 protein sequence  
 Red=Cloning site Green=Tags(s)

MASGCKIGPSILNSDLANLGAELRMLDMSGADYLHLDVMDGHFVFNITFGHPVVESLRKQLGQDPFFDMH  
 MMVSKPEQWVKPMAVAGANQYTFHLEATENPGALIKDIRENGMKVGLAIKPGTSVEYLAPWANQIDMALV  
 MTVEPGFGGQKFMEDMMPKVHHLRTQFPPLDIEVDGGVGPDTVHKCAEAGANMIVSGSAIMRSEDPRSVI  
 NLLRNVCSAAQKRSLDR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6557\\_e01.zip](https://cdn.origene.com/chromatograms/mk6557_e01.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_199229

**ORF Size:** 684 bp

**OTI Disclaimer:** 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](#)

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

**Reconstitution Method:**

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

**RefSeq:** [NM\\_199229.3](#)

**RefSeq Size:** 3265 bp

**RefSeq ORF:** 687 bp

**Locus ID:** 6120

**UniProt ID:** [Q96AT9](#)

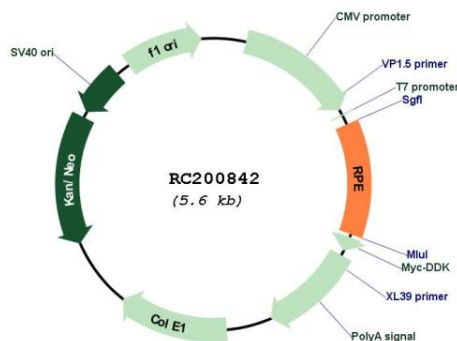
**Cytogenetics:** 2q34

**Protein Pathways:** Metabolic pathways, Pentose and glucuronate interconversions, Pentose phosphate pathway

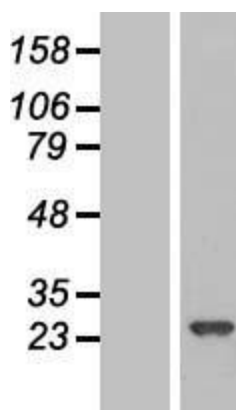
**MW:** 24.9 kDa

**Gene Summary:** Catalyzes the reversible epimerization of D-ribulose 5-phosphate to D-xylulose 5-phosphate. [UniProtKB/Swiss-Prot Function]

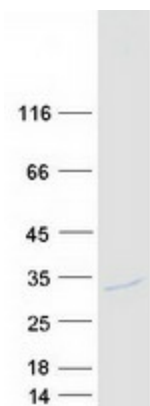
### Product images:



Circular map for RC200842



Western blot validation of overexpression lysate (Cat# [LY404697]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200842 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified RPE protein (Cat# [TP300842]). The protein was produced from HEK293T cells transfected with RPE cDNA clone (Cat# RC200842) using MegaTran 2.0 (Cat# [TT210002]).