OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RC211455

P protein (OCA2) (NM_000275) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	P protein (OCA2) (NM_000275) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	P protein
Synonyms:	BEY; BEY1; BEY2; BOCA; D15S12; EYCL; EYCL2; EYCL3; HCL3; P; PED; SHEP1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

View online »

ORF Nucleotide Sequence:

>RC211455 representing NM_000275
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCATCTGGAGGGCAGAGACGGCAGGCGGTACCCCGGCGCGCCGGCGGTGGAGCTCCTGCAGACGTCCG
TGCCCAGCGGACTCGCTGAACTTGTGGCCGGCAAGCGCAGGCTTCCTCGGGGAGCCGGTGGAGCTGACCC
CTCGCACTCCTGCCCCAGGGGGGCTGCCGGGCAGAGCTCTTGGGCTCCTGCAGGCCAGGAGTTTGCTTCA
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ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
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Protein Sequence:

>RC211455 representing NM_000275
Red=Cloning site Green=Tags(s)

MHLEGRDGRRYPGAPAVELLQTSVPSGLAELVAGKRRLPRGAGGADPSHSCPRGAAGQSSWAPAGQEFAS
FLTKGRSHSSLPQMSSSRSKDSCFTENTPLLRNSLQEKGSRCIPVYHPEFITAEESWEDSSADWERRYLL
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RRSEHSVMSRTFEVLTRETVSISIRASLQQTQAVPLLMAHQYLRGSVETQVTIATAILAGVYALIIFEIV
HRTLAAMLGSLAALAALAVIGDRPSLTHVVEWIDFETLALLFGMMILVAIFSETGFFDYCAVKAYRLSRG
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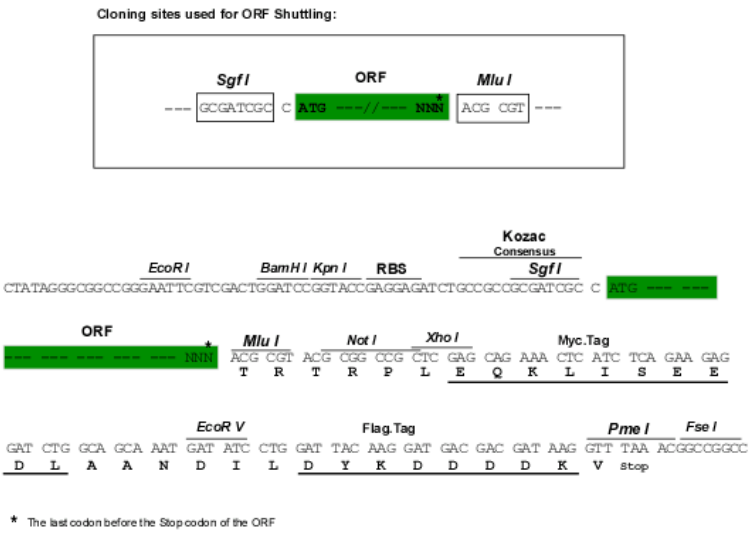
IIVSNQELRKMGLDFAGFTAHMFIGICLVLLVCFPLLRLLYWNRKLYNKEPSEIVELKHEIHVWRLTAQR
ISPASREETAVRRLLLGKVLALEHLLARRLHTFHRQISQEDKNWETNIQELQKKHRISDGILLAKCLTVL
GFVIFMFFLNSFVPGIHLDLGWIAILGAIWLLILADIHDFEIILHRVEWATLLFFAALFVLMEALAHLHL
IEYVGEQTALLIKMVPEEQRLIAAIVLVVWVSALASSLIDNIPFTATMIPVLLNLSHDPEVGLPAPPLMY
ALAFGACLGGNGTLIGASANVVCAGIAEQHGYGFSFMEFFRLGFPMMVVSCTVGMCYLLVAHVVVGWN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg2882_d01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_000275

ORF Size: 2514 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_000275.3

RefSeq Size: 3136 bp

RefSeq ORF: 2517 bp

Locus ID: 4948

UniProt ID: Q04671

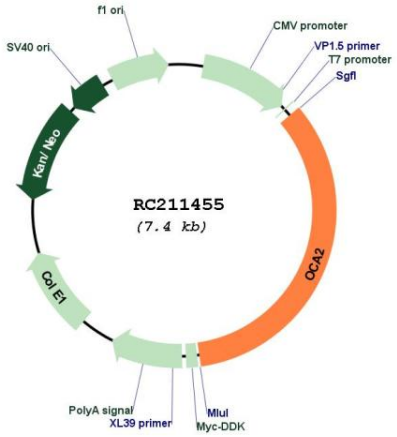
Cytogenetics: 15q12-q13.1

Protein Families: Druggable Genome, Transmembrane

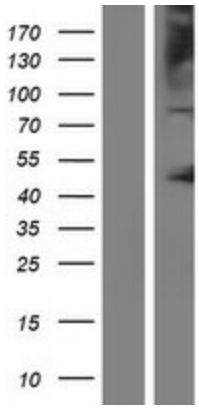
MW: 92.7 kDa

Gene Summary: This gene encodes the human homolog of the mouse p (pink-eyed dilution) gene. The encoded protein is believed to be an integral membrane protein involved in small molecule transport, specifically tyrosine, which is a precursor to melanin synthesis. It is involved in mammalian pigmentation, where it may control skin color variation and act as a determinant of brown or blue eye color. Mutations in this gene result in type 2 oculocutaneous albinism. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jul 2014]

Product images:



Circular map for RC211455



Western blot validation of overexpression lysate (Cat# [LY424826]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC211455 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).