

## Product datasheet for RC218746

### PROP1 (NM\_006261) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	PROP1 (NM_006261) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PROP1
Synonyms:	CPHD2; PROP-1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC218746 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGAAGCAGAAAGGAGGCGCCAGGCTGAGAAGCCAAAGAAGGGGCGAGTCGGCAGCAGCCTGTTGCCTG  
AGAGACACCCGGCCACTGGGACCCCGACCACCACGGTGGACTCGAGTGTCCACCCTGCAGAAGGCTCCC  
TGGTGCAGGAGGGGGGAGATCAAGTTCTCCCCGAAGGAGGACAGAGGGGCCCGCCGACTCCCGGCGC  
CGCCACCGCACCACCTTCAGCCAGTGCAGTTGGAACAGCTGGAGTCAGCCTTTGGGAGGAACAGTACC  
CCGACATCTGGGCCGAGAGAGTCTTGCCGGGACACTGGCCTCAGTGAGGCCGAATCCAGGTCTGGTT  
CCAGAACCGCAGAGCTAAGCAACGGAAGCAAGAGCGCTCACTGCTTCAGCCTCTGGCCCATCTGTCTCCT  
GCCGCTTTTCCAGCTTCTTGCCAGAGTCCACTGCTTGCCCTATTCTTACGCAGCACCACCACCACAG  
TGACCTGCTTCCCTCACCCCTACAGCCATGCCCTCCCTTCCCAGCCCTCCACAGGAGGCGCCTTTGCTTT  
GTCACACCAGTCTGAGGACTGGTACCCTACCTTGACCCAGCCCTGCCGGCCATCTGCCCTGCCCCCA  
CCCCCTCCCATGCTCCCCCTCAGCCTTGAGCCATCCAAGTCTGGAAC

**ACGCGT**ACGCGGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC218746 protein sequence  
 Red=Cloning site Green=Tags(s)

MEAERRRQAEKPKKGRVGSLLPERHPATGTPTTTVDSSAPPCRRLPGAGGGRSRFSPQGGQRGRPHSRR  
 RHRTTFSPVQLEQLESFAFRNQYVDIWARESLARDTGLSEARIQVWFQNRRAKQRKQERSLLQPLAHLSP  
 AAFSSFLPESTACPYSYAAPPPVTCFPHPYSHALPSQPSTGGAFALSHQSEDWYPTLHPAPAGHLPCPP  
 PPPMLPLSLEPSKSWN

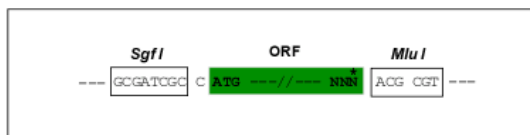
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6474\\_f06.zip](https://cdn.origene.com/chromatograms/mk6474_f06.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\_006261

**ORF Size:** 678 bp

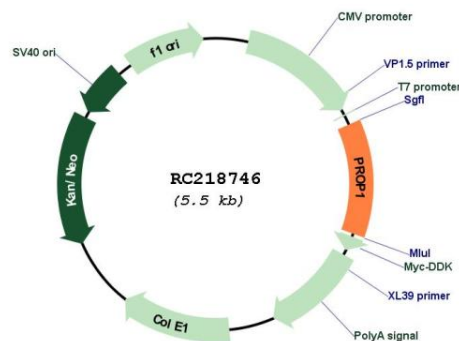
**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of 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](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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](#)

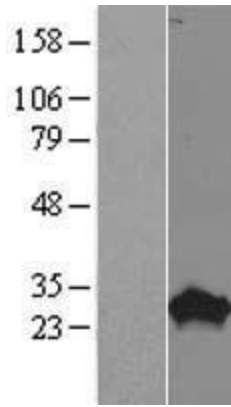
**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<u>NM_006261.4, NP_006252.3</u>
<b>RefSeq Size:</b>	1464 bp
<b>RefSeq ORF:</b>	681 bp
<b>Locus ID:</b>	5626
<b>UniProt ID:</b>	<u>O75360</u>
<b>Cytogenetics:</b>	5q35.3
<b>Protein Families:</b>	Druggable Genome, Transcription Factors
<b>MW:</b>	25 kDa
<b>Gene Summary:</b>	This gene encodes a paired-like homeodomain transcription factor in the developing pituitary gland. Expression occurs prior to and is required for expression of pou domain transcription factor 1, which is responsible for pituitary development and hormone expression. Mutations in this gene have been associated with combined pituitary hormone deficiency-2 as well as deficiencies in luteinizing hormone, follicle-stimulating hormone, growth hormone, prolactin, and thyroid-stimulating hormone. [provided by RefSeq, Sep 2011]

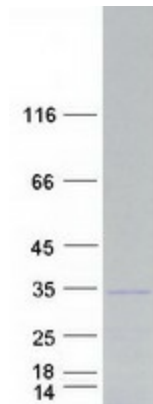
### Product images:



Circular map for RC218746



Western blot validation of overexpression lysate (Cat# [LY416763]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC218746 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PROP1 protein (Cat# [TP318746]). The protein was produced from HEK293T cells transfected with PROP1 cDNA clone (Cat# RC218746) using MegaTran 2.0 (Cat# [TT210002]).