

Product datasheet for **RC201140**

PROX1 (NM_002763) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	Myc-DDK
Symbol:	PROX1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide
Sequence:**

>RC201140 ORF sequence

Red=Cloning site Blue=ORF Green=Tags(s)

 TTTTGTAAACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGC**

 ATGCCTGACCATGACAGCACAGCCCTCTTAAGCCGGCAAACCAAGAGGAGAAGAGTTGACATTGGAGTGA
AAAGGACGGTAGGGACAGCATCTGCATTTTGTCTAAGGCAAGAGCAACGTTTTTTAGTGCCATGAATCC
CCAAGTTCTGAGCAGGATGTTGAGTATTCAGTGGTGCAGCATGCAGATGGGAAAAAGTCAAATGTACTC
CGCAAGCTGCTGAAGAGGGCGAACTCGTATGAAGATGCCATGATGCCTTTTCCAGGAGCAACCATAATTT
CCCAGCTGTTGAAAAATAACATGAACAAAAATGGTGGCACGGAGCCAGTTTCCAAGCCAGCGGTCTCTC
TAGTACAGGCTCCGAAGTACATCAGGAGGATATATGCAGCAACTCTTCAAGAGACAGCCCCCAGAGTGT
CTTTCCCTTTTGGCAGGCCTACTATGAGCCAGTTTGATATGGATCGCTTATGTGATGAGCACCTGAGAG
CAAAGCGCGCCCGGTTGAGAATATAATTCGGGGTATGAGCCATTCAGGAGTGTGGCATTAAAGGGGCAA
TGAAAATGAAAGAGAGATGGCCCGCAGTCTGTGAGTCCCGAGAAAGTTACAGAGAAAAACAACGCAAG
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AGGAGCGCCGACAGCTGAAACAGCAGCTGGAGGACATGCAGAAACAGCTGCGCCAGCTGCAGGAAAAAGTT
CTACCAATCTATGACAGCACTGATTCGAAAAATGATGAAGATGGTAACCTGTCTGAAGACAGCATGCGC
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ACCTTGAAACAGGAAGTGAACACTGCCATGTGCAAGTTGTGGAACTGTGGTCAAAGTCTTTTCGGCCA
AGCCCTCCCGCCAGGTTCTCAGGTCTTCCACCTCTCCAGATCCCCAGGCCAGATTTGCAGTCAATGG
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CTGGACACCTTTGGCAATGTGCAGATGGCCAGTTCCACTGACCAGACAGAAGCACTGCCCTGGTTGTCC
GCAAAACTCCTCTGACCACTCTGCCTCCGGCCCTGCCGCTGGCGGCCACCACCAGCCCTGCACCAGTC
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CTCCGACGTAAAGTTCAACAGATGCATTACCTCTCAGCTCATCAAGTGGTTTAGCAATTTCCGTGAGTTT
TACTACATTAGATGGAGAAGTACGCACGTCAAGCCATCAACGATGGGGTACCAGTACTGAAGAGCTGT
CTATAACCAGAGACTGTGAGCTGTACAGGGCTCTGAACATGCACTACAATAAAGCAATGACTTTGAGGT
TCCAGAGAGATTCTGGAAGTTGCTCAGATCACATTACGGGAGTTTTTCAATGCCATTATCGCAGGCAAA
GATGTTGATCCTTCTGGAAGAAGGCCATATAAAGGTCACTGCAAGCTGGATAGTGAAGTCCCTGAGA
TTTTCAATCCCGAACTGCCTACAAGAGCTGCTTCATGAG

ACGCGTACGCGGCGGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC201140 protein sequence
 Red=Cloning site Green=Tags(s)

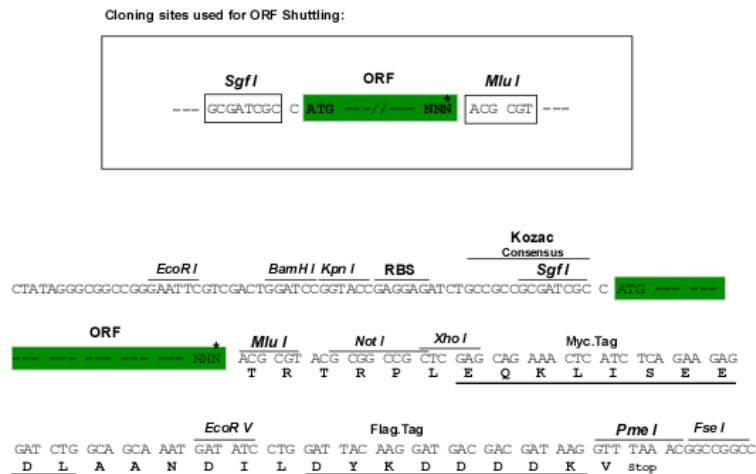
MPDHDSTALLSRQTKRRRVDIGVKRTVGTASAFFAKARATFFSAMNPQGSEQDVEYSVVQHADGEKSNVL
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 LSPFGRPTMSQFDMDLRDLDEHLRAKRARVENIIRGMSHSPSVALRGNENEREMAPQSVSPRESYRENKRK
 QKL PQQQQSFQQLVSARKEQKREERRQLKQLED MQQLRQLQEKFYQIYDSTDSENEDGNLSEDSMR
 SEILDARAQDSVGRSDNEMCELDPGQFIDRARALIREQEMAENKPKREGNNKERDHGPNSLQPEGKHLAE
 TLKQELNTAMSQVVDTVVKVFSAPSRQVPQVFPPLQIPQARFAVNGENHNHFTANQRLQCFGDV IIPNP
 LDTFGNVQMASSTDQTEALPLVVRKNSSDQSASGPAAGGHHQPLHQSPLSATTGTTSTFRHPFPLPLMA
 YPFQSPLGAPSGFSKDRASPESLDL TRD TTS LR TKMSSHLSHHPCSPAHPSTAEGLSLSL IKSECG
 DLQDMSEISPYSGSAMQEGLSPNHLKKAKLMFFYTRYPSNMLKTYFSDVKFNRCITSQLIKWFSNFREF
 YYIQMEKYARQAINDGVTSTEELSITRDCELYRALNMHYNKANDFEVPERFLEVAQITLREFFNAIAGK
 DVDPSWKKAIIYKICKLDSEVPEIFKSPNCLQELLHE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6203_c07.zip

Restriction Sites: Sgfl-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_002763

ORF Size: 2211 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 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.

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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_002763.5](#)

RefSeq Size: 8178 bp

RefSeq ORF: 2214 bp

Locus ID: 5629

UniProt ID: [Q92786](#)

Cytogenetics: 1q32.3

Domains: Prox1

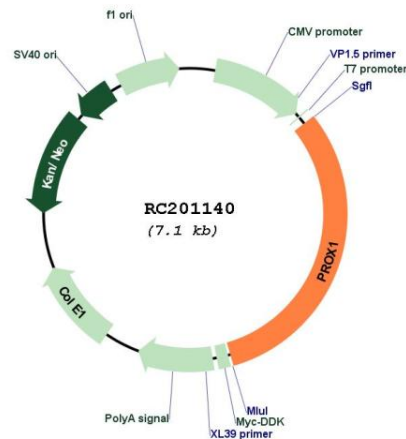
Protein Families: Embryonic stem cells, ES Cell Differentiation/IPS

MW: 83.2 kDa

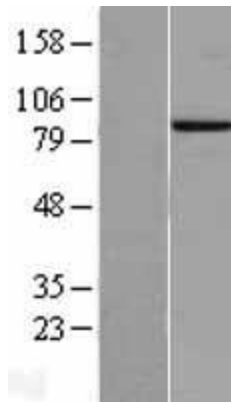
Gene Summary:

The protein encoded by this gene is a member of the homeobox transcription factor family. Members of this family contain a homeobox domain that consists of a 60-amino acid helix-turn-helix structure that binds DNA and RNA. The protein encoded by this gene is conserved across vertebrates and may play an essential role during development. Altered levels of this protein have been reported in cancers of different organs, such as colon, brain, blood, breast, pancreas, liver and esophagus. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jul 2012]

Product images:



Circular map for RC201140



Western blot validation of overexpression lysate (Cat# [LY400978]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201140 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).