

Product datasheet for **MR209414**

Prr14 (NM_145589) Mouse Tagged ORF Clone

Product data:

| | |
|--------------------|--|
| Product Type: | Expression Plasmids |
| Product Name: | Prr14 (NM_145589) Mouse Tagged ORF Clone |
| Tag: | Myc-DDK |
| Symbol: | Prr14 |
| Synonyms: | BC006909 |
| Vector: | pCMV6-Entry (PS100001) |
| E. coli Selection: | Kanamycin (25 ug/mL) |
| Cell Selection: | Neomycin |



[View online »](#)

ORF Nucleotide Sequence:

>MR209414 representing NM_145589
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGACTTGCCTGGAACTCCAGCCCTTTTACACAGCCAAGCCTGTGCCCTCAGCCTCTATCTCGAGCAT
 CATGGGAAGCCAGGAGCCGAAAAGACCGAGGCTGCAGCCTTTGGGGACCCCTTCATCCCTAGAAAAGGC
 CTCTCGGAGGGTCTTGGCGTGGTGTGGAAGATGTCATGACTACAAACAGGGTCCCCCTGACACACAAA
 GAGGACTCCAGCCACTGACTCACAACCATCATCAGGATCCTGTCTGCACACAGTCACTGTCTTAC
 CATCCCAACAGGTCAAGTGGTCCATGCAAGCCAGGCTCCTGACCCACTGCATTTGTGCAGAGAACCCTT
 GACTCGAGCCCGCAGTCTCGCTGCCTTGGAAATGAGATCAAGGCAGCATCTGGCCAGAGGAGAGC
 CCCTCAAAAAGACAGACCAGGTCCACAGCCACCCTAGTGGTGGTACTGGAAGACATTGCCAGTGGCA
 GACAACCAGCAGAGGGTTTTGATGAAGATCAGCCAACCTCATTGTCCAGCACAAAGCACCTTCAGAAG
 CCTGAAGGGCCCGGGAAGCACTGCCACAGAAGGGGTCTGGACTTGAAGCACGCCAACCTTACTTTTG
 TCCTTACCCGAGAGCTGAGCCTGTGACAAAAGCTGGTCAGCCAATGCCTACACCCAGTGACCTAGAAC
 CCCCATTCCAAGTGTCTACTCTACCTGCAGATCCTCCAGAGAGTCCAGTACCAGATCCTGTCTGGAGAC
 CCCGGTATTCCAACATCGTCAAGCCTTTTACGACCCCGTCTCAGTCCCTGGGGCTTGGCCCTCTCTTC
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 GGCTCCTGTCCATCCCAGCCAAGCCAGTCCAGGCCCGGAGACATACTGTGGTTGTGGGGAGATGGC
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 GATTTTTACCAGCTCTAGGAAGTCCGAAGGGCAGTAGAATTTCCGGACAGTAGCCTTCTCGATCCCGG
 CGACCATCAGAGGGTCCGACCCGAGCAAGCAGAACCCTTACTCCAACCTGGCACCCAGCCAGGATG
 TGGGGTCTCTACTGCAAGAAAGGCTGAGGGAGCTAGATGCCTTGCTCCTGGAGGAGGAGACAGATAAGGA
 ACACCTTGTACCTC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR209414 representing NM_145589
 Red=Cloning site Green=Tags(s)

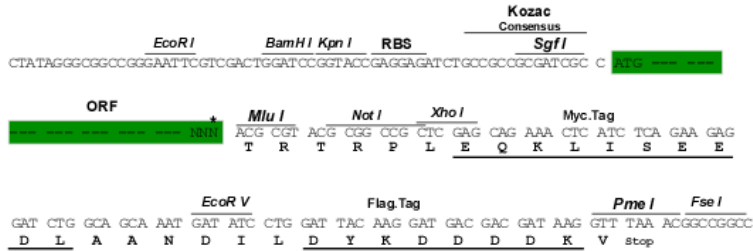
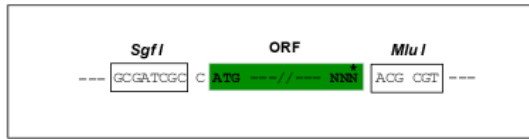
MDLPGNSSPFTQPSLCRQPLSRASWEARSPKRPRLQPLGTPSSLEKASRRVLAVVLEDVMTNRPVPLTHK
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 PSKKTQVQPPTLVVVLEDIASGRQPAEGFDEDQPNLIVPAQSTFRSLKGPCHKHRRGLDLEARPTLTL
 SLHPRAEPVTKAGQPMPTPSDLEPPFQLSTLPADPPESPVPDPALETPIPTSSLLRPRLSPWGLAPLF
 RSVRSKLESFADIFFTPNKTPQPPPPSPMKLELKIASEAEQSRATEKITSVSPRPPIRQWRTQCNSLA
 PVSKSSLGRSYSPDLGPPDPGSWPPVPSQPSQSRPRRHTVGCgemartPPPPRCLRKEVFPLGGVGS
 PSLTTSCSANAPASFCEPAEPRLGSTKGKELRASKDKVFSDPETKTMGKVSFRIRRTVPVRLQPNLTPM
 GLPRPIRLNKKEFTLEEIYTNKNYQSPTTRRTFETIFEEPRERNGTLIFTSRKLRAVEFRDSSLPRSR
 RPSRGVRTAASRTLTPNLAPSQDVGSLLQERLRELDALLLEEETDKEHPCHL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

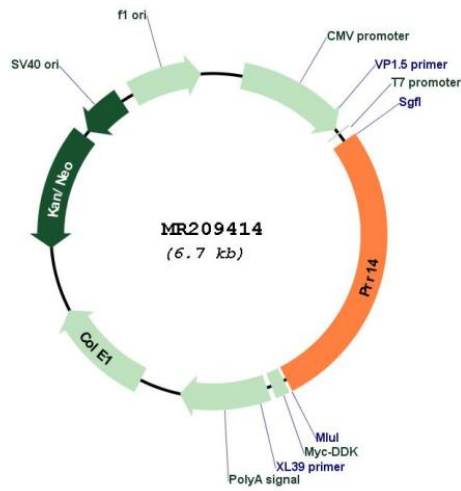
Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM_145589

ORF Size: 1836 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.

RefSeq: [NM_145589.2](#), [NP_663564.2](#)

RefSeq Size: 2325 bp

RefSeq ORF: 1839 bp

Locus ID: 233895

UniProt ID: [Q7TPN9](#)

Cytogenetics: 7 F3

MW: 68.3 kDa

Gene Summary: Functions in tethering peripheral heterochromatin to the nuclear lamina during interphase, possibly through the interaction with heterochromatin protein CBX5/HP1 alpha (By similarity). Might play a role in reattaching heterochromatin to the nuclear lamina at mitotic exit (By similarity). Promotes myoblast differentiation during skeletal myogenesis, possibly by stimulating transcription factor MyoD activity via binding to CBX5/HP1 alpha (PubMed:25906157) (By similarity). Involved in the positive regulation of the PI3K-Akt-mTOR signaling pathway and in promoting cell proliferation, possibly via binding to GRB2 (By similarity).[UniProtKB/Swiss-Prot Function]