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Product datasheet for RC214026

PRDM16 (NM_022114) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PRDM16 (NM_022114) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PRDM16
Synonyms:	CMD1LL; KMT8F; LVNC8; MEL1; PFM13
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC214026 representing NM_022114
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCGATCCAAGGCGAGGGCGAGGAAGCTAGCCAAAAGTGACGGTGACGTTGTAAATAATATGTATGAGC
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CTGGCCTGGGGGTCTGGGCCAAGAGGAAGATGGAAGCCGGGGAGAGGCTGGGCCCCTGCGTGGTGGTGCC
CCGGGCGGCGGCAAAGGAGACAGACTTCGGATGGGAGCAAATACTGACGGACGTGGAAGTGTCGCCCCAG
GAAGGCTGCATCACAAAGATCTCCGAAGACCTGGGCAGTGAGAAGTTCTGCGTGGATGCAAATCAGGCGG
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GATCAGTGAGCAGATTTACTATAAAGTCATTAAGGACATTGAGCCAGGTGAGGAGCTGCTGGTGCACGTG
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TCCAGGCCGCACCCGGGGAGCCTGCCCTTCTCCACGGCGCCTCCCACGTTCCCCGCACTCACCCCCGGCT
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Protein Sequence:

>RC214026 representing NM_022114
Red=Cloning site Green=Tags(s)

MRSKARARKLAKSDGDVVNNMYEPNRDLLASHSAEDEAEDSAMSPIPVGPPSPFPTSEDFTPKEGSPYEA
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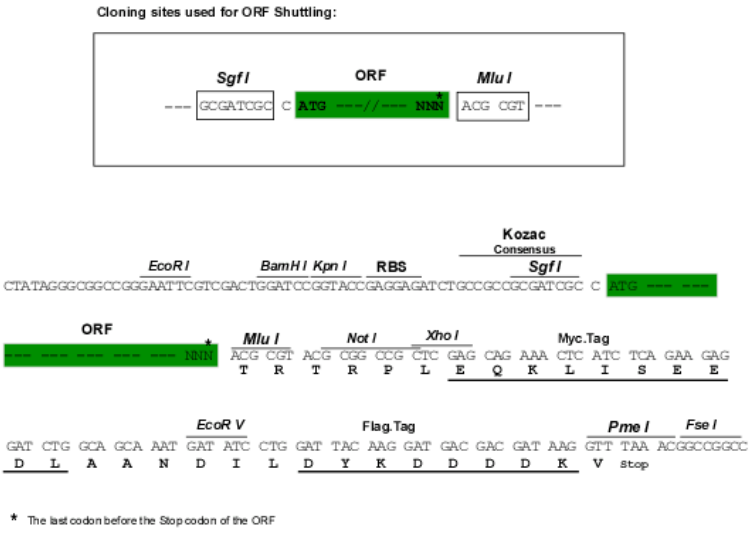
TGATSESGAFHPINHL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8029_d03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

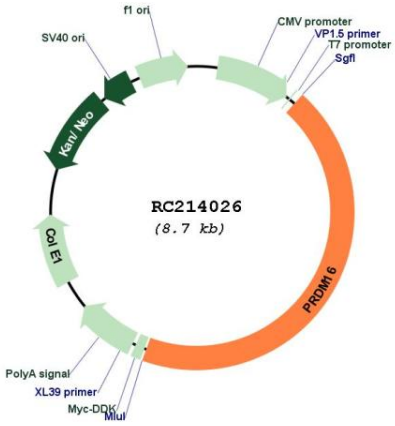


ACCN: NM_022114

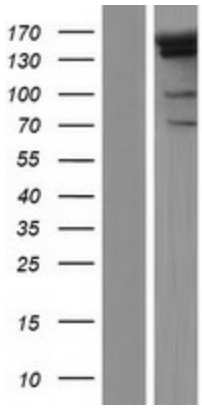
ORF Size: 3828 bp

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_022114.4
RefSeq Size:	8726 bp
RefSeq ORF:	3831 bp
Locus ID:	63976
UniProt ID:	Q9HAZ2
Cytogenetics:	1p36.32
MW:	140.1 kDa
Gene Summary:	The reciprocal translocation t(1;3)(p36;q21) occurs in a subset of myelodysplastic syndrome (MDS) and acute myeloid leukemia (AML). This gene is located near the 1p36.3 breakpoint and has been shown to be specifically expressed in the t(1:3)(p36,q21)-positive MDS/AML. The protein encoded by this gene is a zinc finger transcription factor and contains an N-terminal PR domain. The translocation results in the overexpression of a truncated version of this protein that lacks the PR domain, which may play an important role in the pathogenesis of MDS and AML. Alternatively spliced transcript variants encoding distinct isoforms have been reported. [provided by RefSeq, Jul 2008]

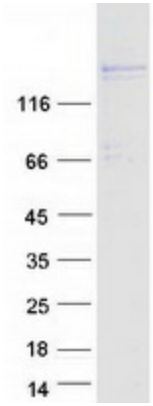
Product images:



Circular map for RC214026



Western blot validation of overexpression lysate (Cat# [LY411786]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC214026 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PRDM16 protein (Cat# [TP314026]). The protein was produced from HEK293T cells transfected with PRDM16 cDNA clone (Cat# RC214026) using MegaTran 2.0 (Cat# [TT210002]).