

Product datasheet for **RR214606**

Pelp1 (NM_001024270) Rat Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Pelp1 (NM_001024270) Rat Tagged ORF Clone
Tag: Myc-DDK
Symbol: Pelp1
Synonyms: RGD1306320
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >RR214606 representing NM_001024270
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGCGGCAGCCGTTCTTAGTGGGCCACCACGGGCTCCCCTGCTGGGGCTCCTGGCGGCCTGGGGTCT
TCTCTGCGCGGGATCCGGTCCGCTTTGCGTCTGCTGCTGTTGGAGAGCGTTTCTGGGTGTTGCAACC
GCGAACAGGGTCGCACGTTGCCCTGTGCATCCCCAATCCAGTGGGCCCTTATTTGCCTGGGCTCATG
TGCTTACTGAGGCTGCATGGGACAGCGGTGGGGCTCAGAATCTTTCAGCTCTTGGGGCATTGGTGAATC
TCAGTAATGCACACCTTAGCTCCATCAAACTCGGTTTGAAGGCCTGTGTCTGCTGCTCCTGTTGGTAGG
GGAGAGCCCCACAGAGTTGTTCCAGCAACTGTGTTTCTTGGCTTCGGAGCATCCAGCAGGTGCTGCAG
TCTCAGGACTCACCGCCACCATGGAGCTGGCTGTGGCTATCCTGAGGGATCTGCTTCGATATGCATCCC
AGCTTCTACCTGTTTCGGGACATCTCCACCAACCACCTTCTGGGCTTCTTACTTCTTGTGGGCT
CAGACCAGAGTGTGAGCAATCAGCTTTGGAGGGAATGAAGGCTTGTGTGACCTATTTTCTCGGGCTGT
GGCTTTCTAAAAGAAAGCTTGTCTTTCTTCTGTCTCGGTTGGATTCTTGAACCTCAGCTCCAAC
AGAGAACTGGGAGCAGGAGCTGCACAGCCTGTGACCTCACTGCACAGCTTGTGGGGTCCCTGTTTGAG
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ATAACTCATGTCTCCTCCAGCTTTGGCAGAGGTTTTTCAGGACTGGCCGTTGCTGGGGCTCATGCT
CAGCTCTGAGTTTGGGGCTCCTGTGTCCGTTTCTGTGCAGGAAATCCTGGACCTCATCTGCCGATCCTT
GGTATCAGTAGCAAGAATATTAAGTCTTGGAGATGGTCCCCTCCGTTGCTGCTGCTGCCCTCTCTCC
ACCTTGAAGCCTTGGACTTGCTCTCTGCACTGATCCTTGGCTGTGGAGGCCGACTCTTGCCTTTGGTGC
CCTGATCAGCCGGCTGCTTCCCCAGTTCTCAACCTGGAGCACTGGGAGGACGCTCTGGCTCCAGGC
CAGGAGAGGCCTTACAGCACCATTCCGACCAAGGTGTACGCTATCTTAGAGCTATGGGTGCAGGTTTGTG
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CTCCCCTCCAGCTGATGCTTAAAGCTCTGCACTACCAGGGAAGCTCTGATGGAGGTTTCAAAGTGGG
AAGCTAGTGCCCTAAGAAGCTAAAACCTGATATGGGGAAGCTTTGGCTCCACCCAGCCAAAGGAAAG



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GAGATAGGAATGCCAACAGCGATGTGTGTGCAGCTGCACTGAGAGGTCTCAGCCGACCATCCTCATGTG
 CGGGCCTCTCGTCAAGGAGGAGACTCACAGGAGGCTTCATGATCTCGTCTGCCCTGGTCATGAGTGTC
 CAGCAGGGTGAAGTCTGGGAAGTTCTCCTTACAACAGCTCTGCTGTCGCCTGGAGCTCTACCGCTGC
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 AGGAAGAAGAGTTTGGAGGAGAAATTTGAGGAGGAAGAAGGTGAATTAGAAGAGGAGGAAGAGGAGGAGGA
 AGAAGAGTTAGAAGAGGTAGAAGATGTGGAGTTCGGTTCAGCAGGGGAAGTGAAGAAGGTGGACCTCCA
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 CTGGGCTCTTATTGGAAGTTGAGGAGCCAGGGCCGAGGATGGGCTGGGCTGAGATCGCGCCACCT
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 AAGCCACCACCTGCTACAGAGCTGACTCT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RR214606 representing NM_001024270
 Red=Cloning site Green=Tags(s)

MAAAVLSGPTTGSAPAGPGGPGGLSAAGSGPRLRLLLLESVSGLLQPRTGSHVAPVHPPIQWAPYLPGLM
 CLLRLHGTAGGAQNL SALGALVNL SNAHLS SSIKTRFEGLCLLSLLVGESPTL FQQHCVSWLRSIQVQLQ
 SQDSPPTMELAVAILRDLLRYASQLPTLFRD I STNHLPGLL T SLLGLRPECEQSALEGMKACVTFPRAC
 GFLKGLASFFLSRLDSLNPQLQQLACECYSRLPSL GAGFSQGLKHTENWEQELHSLTSLHSLLGSLFE
 ETETAPVQSEGPVEMLLSPSEDDNTHVLLQLWQRF SGLARCLGLMLSSEFGAPVSVVQVQVILDLICRIL
 GISSKNINLLGDGPLRLLLPSLHLEALDLLSALILACGRLLRFGALISRLLPQVLTNTWSTGRDALAPG
 QERPYSTIRTKVYAILELWVQVCGASAGMLQGGASGEALLTHLLSDISPPADALKL CSTRGSSDGGQLQSG
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 QQGEVLGSSPYNSSCCRELE YRLLLALLLAPSPRCPPPLSCALKAFSLGQWEDSLEVSSFCSEALVTCSA
 LTHPRVPLQSSGPACPTPAPVPPPEAPSSFRAPAFHTPGMP SIGALPSGPVPSAGPIPTVGSMSAG
 SVPSTGPVPSRPGPATANHLGLAVPGLVSVPPRLLPGSENRHAGSGEDPVLAPSGTTPPSIPDETFFGG
 RVPRPAFVHYDKEEASDVEISLESDDSVIVPEGLPSLPPPSGTTPPVAPTGPPTASPPVPAKEDSE
 ELPATPGPLPPPPPPPPVSGPVTLPPPQLVPEGTGPGGGPTAMEEDLTVININSDEEEEEEEEEEEED
 EEEEEEDFEEDDEEYFEEDDEE EEEEEEEFEEDDEE EEEEEEEFEEDDEE EEEEEEEFEEDDEE
 PPTLPPALPPTDSPKVQPEAEPEPGLLLEVEEPAEDGPGPEIAPTLAPEVLP SQEEVEREGESPTAGPP
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 KPPPAPEPDS

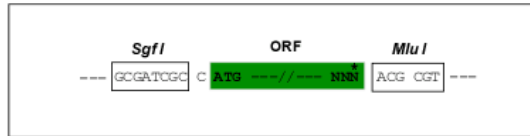
TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

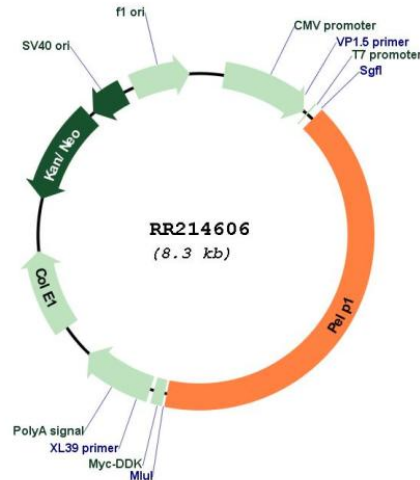
Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM_001024270

ORF Size: 3390 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_001024270.2](#), [NP_001019441.2](#)

RefSeq Size: 3530 bp

RefSeq ORF: 3393 bp

Locus ID: 360552

UniProt ID: [Q56B11](#)

Cytogenetics: 10q24

MW: 119.2 kDa

Gene Summary: Coactivator of estrogen receptor-mediated transcription and a corepressor of other nuclear hormone receptors and sequence-specific transcription factors. Plays a role in estrogen receptor (ER) genomic activity when present in the nuclear compartment by activating the ER target genes in a hormonal stimulation dependent manner. Can facilitate ER non-genomic signaling via SRC and PI3K interaction in the cytosol. Plays a role in E2-mediated cell cycle progression by interacting with RB1. May have important functional implications in ER/growth factor cross-talk. Interacts with several growth factor signaling components including EGFR and HRS. Involved in nuclear receptor signaling via its interaction with AR and NR3C1. May promote tumorigenesis via its interaction with and modulation of several oncogenes including SRC, PI3K, STAT3 and EGFR. Plays a role in cancer cell metastasis via its ability to modulate E2-mediated cytoskeleton changes and cell migration via its interaction with SRC and PI3K. Functions as the key stabilizing component of the Five Friends of Methylated CHTOP (5FMC) complex; the 5FMC complex is recruited to ZNF148 by methylated CHTOP, leading to desumoylation of ZNF148 and subsequent transactivation of ZNF148 target genes. Component of the PELP1 complex involved in the nucleolar steps of 28S rRNA maturation and the subsequent nucleoplasmic transit of the pre-60S ribosomal subunit. Regulates pre-60S association of the critical remodeling factor MDN1.[UniProtKB/Swiss-Prot Function]