

Product datasheet for **RC203069**

PEF1 (NM_012392) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PEF1 (NM_012392) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PEF1
Synonyms:	ABP32; PEF1A
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC203069 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGCCAGCTATCCTTACCGGCAGGGCTGCCAGGAGCTGCAGGACAAGCACCAGGAGCCCTCCGGGTA
GCTACTACCTGGACCCCAATAGTGGAGGGCAGTATGGTAGTGGCTACCCCTGGTGGTGGTTATGG
GGGTCCTGCCCTGGAGGGCCTTATGGACCACCAGCTGGTGGAGGGCCCTATGGACACCCCAATCCTGGG
ATGTTCCCTCTGGAATCCAGGAGGACCATATGGCGGTGCAGCTCCCGGGGCCCTATGGTCAGCCAC
CTCCAAGTTCTACGGTCCCAGCAGCCTGGGCTTTATGGACAGGGTGGCGCCCTCCCAATGTGGATCC
TGAGGCCCTACTCCTGGTTCCAGTCGGTGGACTCAGATCACAGTGGCTATATCTCCATGAAGGAGCTAAAG
CAGGCCCTGGTCAACTGCAATTGGTCTTCAATCAATGATGAGACCTGCCTCATGATGATAAATGTTTTG
ACAAGACCAAGTCAGGCCGATCGATGTCTACGGCTTCTCAGCCCTGTGGAAATTCATCCAGCAGTGGAA
GAACCTCTCCAGCAGTATGACCGGGACCGCTCGGGCTCCATTAGCTACACAGAGCTGCAGCAAGCTCTG
TCCCAATGGGCTACAACCTGAGCCCCAGTTCACCCAGCTTCTGGTCTCCCGCTACTGCCACGCTCTG
CCAATCCTGCCATGCAGCTTGACCGCTTCCAGGTGTGACCCAGCTGCAGGTGCTGACAGAGGCCTT
CCGGGAGAAGGACACAGCTGTACAAGGCAACATCCGGCTCAGCTTCGAGGACTTCGTACCATGACGGCT
TCTCGGATGCTA

ACGCGTACGCGGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC203069 protein sequence
 Red=Cloning site Green=Tags(s)

MASYPYRQGCPGAAGQAPGAPPGSYYPGPPNSGGQYGSGLPPGGGYGGPAPGGPYGPPAGGGPYGHPNPG
 MFPSTGTPGGPYGGAAPGGPYGQPPSSYGAQQPGLYQGQGAPPNVDP EAYSWFQSVSDHSGYISMKELK
 QALVNCNWSFFNDETCLMMINMFDKTKSGRIDVYGF SALWKF IQQWKNLFQQYDRDRSGSISYTELQAL
 SQMGYNLSPQFTQLLVSRVYCPRSANPAMQLDRFIQVCTQLQVLTEAFREKDTAVQGNIRLSFEDFVTMTA
 SRML

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6194_g05.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_012392

ORF Size: 852 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_012392.4](#)

RefSeq Size: 1997 bp

RefSeq ORF: 855 bp

Locus ID: 553115

UniProt ID: [Q9UBV8](#)

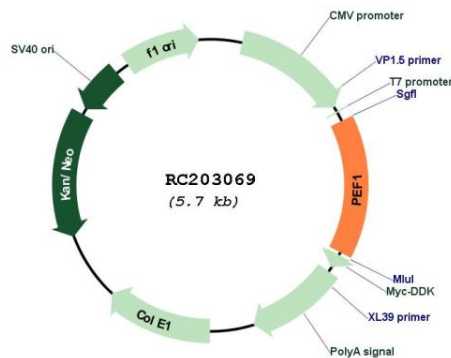
Cytogenetics: 1p35.2

Domains: EFh

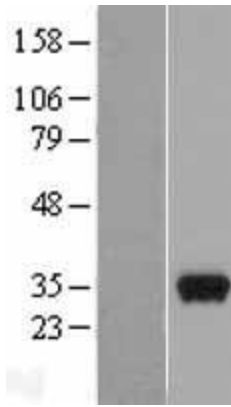
MW: 30.4 kDa

Gene Summary: This gene encodes a calcium-binding protein belonging to the penta-EF-hand protein family. The encoded protein has been shown to form a heterodimer with the programmed cell death 6 gene product and may modulate its function in Ca(2+) signaling. Alternative splicing results in multiple transcript variants and a pseudogene has been identified on chromosome 1. [provided by RefSeq, May 2010]

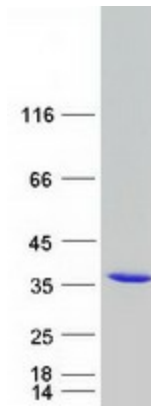
Product images:



Circular map for RC203069



Western blot validation of overexpression lysate (Cat# [LY402204]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC203069 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PEF1 protein (Cat# [TP303069]). The protein was produced from HEK293T cells transfected with PEF1 cDNA clone (Cat# RC203069) using MegaTran 2.0 (Cat# [TT210002]).