

Product datasheet for RC216177

Profilin 2 (PFN2) (NM_002628) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Profilin 2 (PFN2) (NM_002628) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: Profilin 2
Synonyms: D3S1319E; PFL
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC216177 representing NM_002628
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCCGGTTGGCAGAGCTACGTGGATAACCTGATGTGCGATGGCTGCTGCCAGGAGGCCGCCATTGTCCG
GCTACTGCGACGCCAAATACGTCTGGGCAGCCACGGCCGGGGCGTCTTTCAGAGCATTACGCCAATAGA
AATAGATATGATTGTAGGAAAAGACCGGGAAGTTTCTTTACCAACGTTTGACTCTTGGCGGAAGAAA
TGCTCAGTGATCAGAGATAGTCTATACGTCGATGGTACTGCACAATGGACATCCGGACAAAGAGTCAAG
GTGGGGAGCCAACATAACAATGTGGCTGTGGCAGAGCTGGTAGAGCATTGGTTATAGTCATGGGAAAGGA
AGGTGTCCACGGAGGCACACTTAACAAGAAAGCATATGAACTCGCTTTATACCTGAGGAGGTCTGATGTG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC216177 representing NM_002628
Red=Cloning site Green=Tags(s)

MAGWQSYVDNLMCDGCCQEAAIVGYCDAYVWAATAGGVFQSITPIEIDMIVGKDREGFFTNGLTLGAKK
CSVIRDLSLYVDGCTMDIRTKSQGGEPTYNVAVGRAGRALVIVMGKEGVHGGTLNKKAYELALYLRRSDV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6111_g08.zip

Restriction Sites: SgfI-MluI



[View online »](#)

Cloning Scheme:


ACCN: NM_002628

ORF Size: 420 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_002628.5](#)

RefSeq Size: 1950 bp

RefSeq ORF: 423 bp

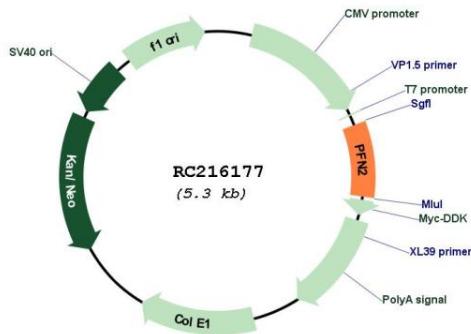
Locus ID: 5217

UniProt ID: [P35080](#)

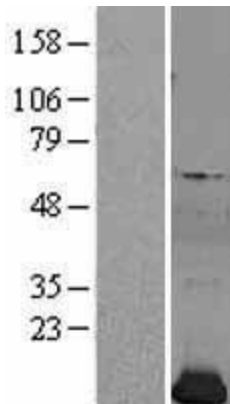
Cytogenetics: 3q25.1
Domains: PROF
Protein Families: Druggable Genome
Protein Pathways: Regulation of actin cytoskeleton
MW: 14.9 kDa

Gene Summary: The protein encoded by this gene is a ubiquitous actin monomer-binding protein belonging to the profilin family. It is thought to regulate actin polymerization in response to extracellular signals. There are two alternatively spliced transcript variants encoding different isoforms described for this gene. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC216177



Western blot validation of overexpression lysate (Cat# [LY400933]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC216177 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).