

## Product datasheet for RC207215

### PTK9 (TWF1) (NM\_002822) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	PTK9 (TWF1) (NM_002822) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PTK9
Synonyms:	A6; PTK9
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC207215 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGACGCGCCGGGGCCGGGAGGAGCAGCCACTTCTGGGGCCGCCGGGGCCGCTGGCTGCACTC  
AGCGCCGGAGCCGGGAGCTAGCGGCCGCCCATGTCCCACCAGACCGGCATCCAAGCAAGTGAAGATGT  
TAAAGAGATCTTTGCCAGAGCCAGAAATGGAAAGTACAGACTTCTGAAAATATCTATTGAAAATGAGCAA  
CTTGTGATTGGATCATATAGTCAGCCTTCAGATTCCTGGGATAAGGATTATGATTCCTTTGTTTACCCC  
TGTTGGAGGACAAACAACCATGCTATATATTATTCAGGTTAGATTCTCAGAATGCCCAGGATATGAATG  
GATATTCATTGCATGGTCTCCAGATCATTCTCATGTTTCGTCAAAAATGTTGTATGCAGCAACAAGAGCA  
ACTCTGAAGAAGGAATTTGGAGGTGGCCACATTAAGATGAAGTATTTGGAACAGTAAAGGAAGATGTAT  
CATTACATGGATATAAAAAATACTTGTGTCAATCTTCCCCTGCCCACTGACTGCAGCTGAGGAAGA  
ACTACGACAGATTAATAATCAATGAGGTACAGACTGACGTGGGTGTGGACACTAAGCATCAAACTACAA  
GGAGTAGCATTCCCATTCTCGAGAAGCCTTTCAGGCTTTGGAAAAATTGAATAATAGACAGCTCAACT  
ATGTGCAGTTGGAAATAGATATAAAAAATGAAATTATAATTTGGCCAACACAACAATACAGAAGTAA  
AGATTTGCCAAAGAGGATTTCCCAAGGATTCAGCTCGTTACCATTCTTTCTGTATAAACATTTCCCATGAA  
GGAGACTATTTAGAGTCCATAGTTTTTATTATTTCAATGCCTGGATACACATGCAGTATAAGAGAGCGGA  
TGCTGTATTCTAGCTGCAAGAGCCGTCTGCTAGAAATTGTAGAAAGACAACACTACAAATGGATGTAATTAG  
AAAGATCGAGATAGACAATGGGGATGAGTTGACTGCAGACTTCCTTTATGAAGAAGTACATCCCAAGCAG  
CATGCACACAAGCAAAGTTTTGCAAAACAAAAGGTCCTGCAGGAAAAAGAGGAATTCGAAGACTAATTA  
GGGGCCAGCGGAAACTGAAGCTACTACTGAT

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC207215 protein sequence  
Red=Cloning site Green=Tags(s)

MTRRGRRRSSHFLGPPAGAAGCTQRRSRELAAMSHQTGIQASEDVKEIFARANGKYRLLKISIESEQ  
LVIGSYSQPSDSWDKDYDSFVLPLEDKQPCYILFRLDSQNAQGYEWIFIAWSPDHSVVRQKMLYAATRA  
TLKKEFGGGHIKDEVFGTVKEDVSLHGYYKLLSQSSPAPLTAEEELRQIKINEVQTDVGVDTKHQTLQ  
GVAFPIAREAFQALEKLNRLNYVQLEIDIKNEIILANTTNTLKDLPKRIPKDSARYHFFLYKHSHE  
GDYLESIVFIYSMPGYTCSIRERMLYSSCKSRLLIEIVERQLQMDVIRKIEIDNGDELTAFLYEEVHPKQ  
HAHKQSFAPKPGPAGKRGIRRLIRGPAETEATTD

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6134\\_a11.zip](https://cdn.origene.com/chromatograms/mk6134_a11.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_002822

**ORF Size:** 1152 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\\_002822.3](#), [NP\\_002813.2](#)

**RefSeq Size:** 3062 bp

**RefSeq ORF:** 1053 bp

**Locus ID:** 5756

**UniProt ID:** [Q12792](#)

**Cytogenetics:** 12q12

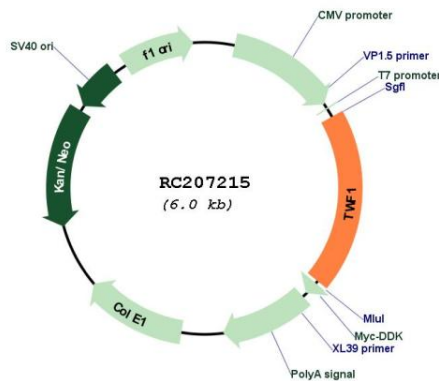
**Domains:** ADF

**Protein Families:** Druggable Genome, Protein Kinase

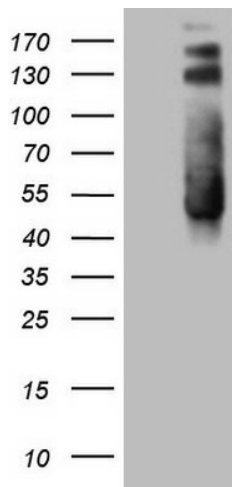
**MW:** 43.9 kDa

**Gene Summary:** This gene encodes twinfilin, an actin monomer-binding protein conserved from yeast to mammals. Studies of the mouse counterpart suggest that this protein may be an actin monomer-binding protein, and its localization to cortical G-actin-rich structures may be regulated by the small GTPase RAC1. [provided by RefSeq, Jul 2008]

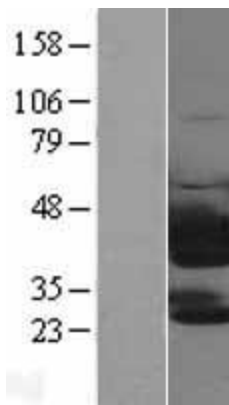
**Product images:**



Circular map for RC207215



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY TWF1 (Cat# RC207215, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-TWF1 (Cat# [TA808935])(1:2000). Positive lysates [LY401004] (100ug) and [LC401004] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY401004]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC207215 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).