

Product datasheet for **RC202543**

PIN1 (NM_006221) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: PIN1 (NM_006221) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: PIN1
Synonyms: DOD; UBL5
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC202543 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGCGGACGAGGAGAAGCTGCCGCCGGCTGGGAGAAGCGCATGAGCCGAGCTCAGGCCGAGTGTACT
ACTTCAACCACATCACTAACGCCAGCCAGTGGGAGCGGCCAGCGGCAACAGCAGCAGTGGTGGCAAAAA
CGGGCAGGGGAGCCTGCCAGGGTCCGCTGCTCGCACCTGCTGGTGAAGCACAGCCAGTCACGGCGGCC
TCGTCTGGCGGACGAGAGAAGATCACCCGACCAAGGAGGAGCCCTGGAGCTGATCAACGGCTACATCC
AGAAGATCAAGTCGGGAGAGGAGACTTTGAGTCTCTGGCCTCACAGTTCAGCGACTGCAGCTCAGCCAA
GGCCAGGGGAGACCTGGGTGCCTTCAGCAGAGGTGAGATGCAGAAGCCATTTGAAGACGCCTCGTTTGCG
CTGCGGACGGGGAGATGAGCGGCCCGTGTTCACGGATTCCGGCATCCACATCATCTCCGCACTAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC202543 protein sequence
Red=Cloning site Green=Tags(s)

MADEEKLPGWKRMRSRSGRVYFNNHITNASQWERPSGNSSSGKNGQGEPARVRCSHLLVKHSQSRRP
SSWRQEKITRTKEEALELINGYIQKIKSGEEDFESLASQFSDCSSAKARGDLGAFSRGQMQKPFEDASFA
LRTGEMSGPVFTDSGIHILRTE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6085_d05.zip



[View online >](#)

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_006221

ORF Size: 489 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_006221.4](#)

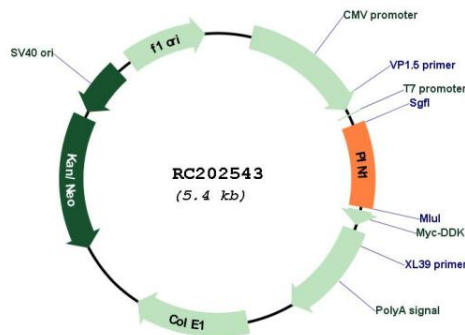
RefSeq Size: 1138 bp

RefSeq ORF: 492 bp

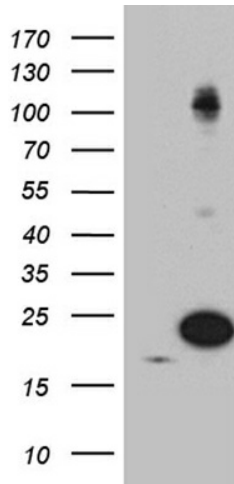
Locus ID: 5300
UniProt ID: [Q13526](#)
Cytogenetics: 19p13.2
Domains: Rotamase, WW
Protein Families: Druggable Genome
Protein Pathways: RIG-I-like receptor signaling pathway
MW: 18.2 kDa

Gene Summary: Peptidyl-prolyl cis/trans isomerases (PPIases) catalyze the cis/trans isomerization of peptidyl-prolyl peptide bonds. This gene encodes one of the PPIases, which specifically binds to phosphorylated ser/thr-pro motifs to catalytically regulate the post-phosphorylation conformation of its substrates. The conformational regulation catalyzed by this PPIase has a profound impact on key proteins involved in the regulation of cell growth, genotoxic and other stress responses, the immune response, induction and maintenance of pluripotency, germ cell development, neuronal differentiation, and survival. This enzyme also plays a key role in the pathogenesis of Alzheimer's disease and many cancers. Multiple alternatively spliced transcript variants have been found for this gene.[provided by RefSeq, Jun 2011]

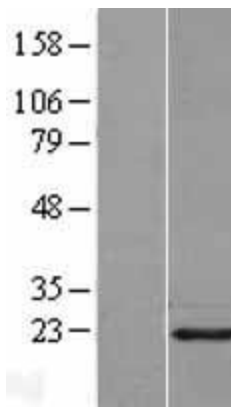
Product images:



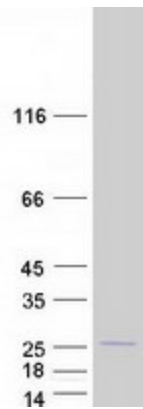
Circular map for RC202543



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY PIN1 (Cat# RC202543, 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-PIN1 antibody (Cat# [TA812247]). Positive lysates [LY401873] (100ug) and [LC401873] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY401873]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202543 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PIN1 protein (Cat# [TP302543]). The protein was produced from HEK293T cells transfected with PIN1 cDNA clone (Cat# RC202543) using MegaTran 2.0 (Cat# [TT210002]).