

Product datasheet for **RC200444**

PDZK1 (NM_002614) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PDZK1 (NM_002614) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PDZK1
Synonyms:	CAP70; CLAMP; NHERF-3; NHERF3; PDZD1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC200444 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGACCTCCACCTTCAACCCCCGAGAATGTAACTGTCCAAGCAAGAAGGGCAAACATATGGCTTCTTCC
 TCGAATTGAGAAGGACACCGAGGGCCACTGGTCCGGGTGGTTGAGAAGTGTAGCCAGCAGAGAAGGC
 TGGCCTTCAAGATGGAGACAGAGTTCTTAGGATCAATGGTGTCTTTGTGGACAAAGAACAATATGCAG
 GTTGTGGATCTGGTCAGAAAAGAGTGGGAATTCAGTGACTTTACTAGTTCTGGATGGGGATTCTATGAGA
 AAGCAGTGA AACACGGGTGGACTTGAAAGAGTTGGGTCAAAGTCAGAAGGAGCAAGTTTGAGTGATAA
 TATACTTTCCCTGTGATGAATGGAGGTGTGCAAACTGGACCCAGCCCCGGCTCTGCTATCTCGTGAAG
 GAAGGAGGCAGCTATGGCTTCTCTGAAAAGTGTCCAAGGTAAAAGGGGGTGTACATGACTGATTA
 CACCTCAAGGTGTGGCTATGAGAGCTGGAGTTCTGGCTGATGATCACTTGATTGAAGTGAATGGAGAGAA
 TGTAGAGGATGCCAGCCATGAGGAAGTGGTTGAAAAGGTGAAGAAGTCAGGAAGCCGTGCATGTTCTCTG
 CTGGTGGACAAAGAACTGACAAGCGTCATGTTGAGCAGAAGATACAATTCAAAAGAGAAAACAGCCAGTT
 TGAAACTGTTACCCACAGCCCCGAATTGTGGAGATGAAGAAAGGAAGCAATGGCTATGGTTTCTATCT
 GAGGGCAGGCTCAGAACAGAAAGGTCAAATCATCAAGGACATAGATTCTGGAAGTCCAGCAGAGGAGGCT
 GGCTTGAAGAACAATGATCTGGTAGTTGCTGTCAACGGCGAGTCTGTGGAACCCCTGGATCATGACAGTG
 TGGTAGAAATGATTAGAAAGGGTGGAGATCAGACTTCACTGTTGGTGGTAGACAAAGAGACGGACAACAT
 GTACAGACTGGCTCATTTTTCTCCATTTCTCTACTATCAAAGTCAAGAACTGCCCAATGGCTCTGTCAAG
 GAGGCTCCAGCTCCTACTCCACTTCTCTGGAAGTCTCAAGTCCACCAGATACTACAGAGGAAGTAGATC
 ATAAGCCTAAACTCTGCAGGCTGGCTAAAGGTGAAAATGGCTATGGCTTCACTTAAATGCGATTCCGGGG
 TCTGCCAGGCTCATTTCATCAAAGAGGTACAGAAGGGCGGTCCTGCTGACTTGGCTGGCTAGAGGATGAG
 GATGTCATCATTGAAGTGAATGGGTGAATGTGCTAGATGAACCCATGAGAAGGTGGTGGATAGAATCC
 AGAGCAGTGGGAAGAATGTCACACTTCTAGTCTGTGGAAGAAGGCCTATGATTATTTCCAAGCTAAGAA
 AATCCCTATTGTTTCTCCCTGGCTGATCCACTTGACACCCCTCCAGATTCTAAAGAAGGAATAGTGGTG
 GAGTCAAACCATGACTCGCACATGGCAAAGAACGGGCCACAGTACAGCCTCACATTCTTCTCAATT
 CTGAAGATACAGAGATG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC200444 protein sequence
 Red=Cloning site Green=Tags(s)

MTSTFNPRECKLSKQEGQNYGFFLRIEKDTEGHLVVRVVEKCSPAEKAGLQDGRVLRINGVFVDKEEHMQ
 VVDLVRKSGNSVTLLVLDGDSYEKAVKTRVDLKELGQSQKEQGLSDNILSPVMNGGVQWTWPRLCYLVK
 EGGSYGFSLKTVQKKGVMYTDITPQGVAMRAGVLADDHLIEVNGENVEDASHEEVVEKVKKSGSRVMFL
 LVDKETDKRHVEQKIQFKRETASLKLPHQPRIEMKKSNGYGFYLRAGSEQKQI IKDIDSGSPAEEA
 GLKNNDLVAVNGESVETLDHDSVVEMIRKGGDQTSLLVVDKETDNMYRLAHFSPFLYYQSQELPNGSVK
 EAPAPTPTSLEVSPDTEEVDPKPKLCRLAKGENGYGFHLN AIRGLPGSF I KEVQKGGPADLAGLEDE
 DVIEVNGVNVLDPEYKVVDRIQSSGKNVTLLVCGKKA YDYFQAKKIPIVSSLADPLDTPPDSKEGIVV
 ESNHDSHMAKERAHSTASHSSNSSEDEM

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6151_c11.zip

Restriction Sites:

SgfI-MluI

Cloning Scheme:


ACCN: NM_002614

ORF Size: 1557 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_002614.4](#)

RefSeq Size: 2301 bp

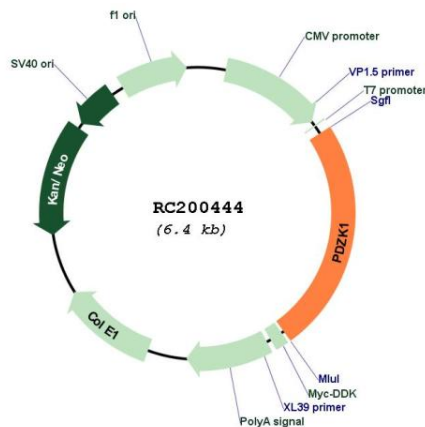
RefSeq ORF: 1560 bp

Locus ID: 5174

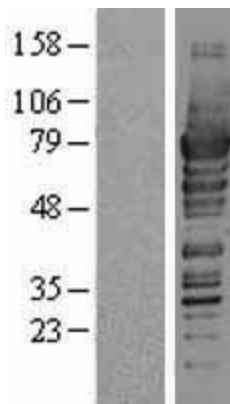
UniProt ID: Q5T2W1
 Cytogenetics: 1q21.1
 Domains: PDZ
 MW: 57.1 kDa

Gene Summary: This gene encodes a PDZ domain-containing scaffolding protein. PDZ domain-containing molecules bind to and mediate the subcellular localization of target proteins. The encoded protein mediates the localization of cell surface proteins and plays a critical role in cholesterol metabolism by regulating the HDL receptor, scavenger receptor class B type 1. Single nucleotide polymorphisms in this gene may be associated with metabolic syndrome, and overexpression of this gene may play a role in drug resistance of multiple myeloma. Pseudogenes of this gene are located on the long arm of chromosome 1. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. [provided by RefSeq, Jan 2011]

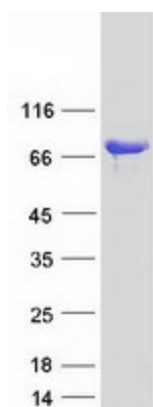
Product images:



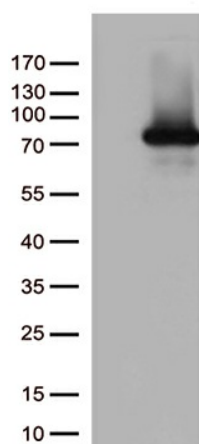
Circular map for RC200444



Western blot validation of overexpression lysate (Cat# [LY400926]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200444 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PDZK1 protein (Cat# [TP300444]). The protein was produced from HEK293T cells transfected with PDZK1 cDNA clone (Cat# RC200444) using MegaTran 2.0 (Cat# [TT210002]).



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY PDZK1 (Cat# RC200444, 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-PDZK1 (Cat# [TA813175])(1:500).