OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RC222707

DEP1 (PTPRJ) (NM_002843) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DEP1 (PTPRJ) (NM_002843) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	DEP1
Synonyms:	CD148; DEP1; HPTPeta; R-PTP-ETA; SCC1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC222707 representing NM_002843.
Blue=ORF Red=Cloning site Green=Tag(s)

GCTCGTTTAGTGAACCGTCAGAATTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGAAGCCGGCGGCGCGGGAGGCGCGGCTGCCTCCGCGCTCGCCCGGGCTGCGCTGGGCGCTGCCGCTG
CTGCTGCTGCTGCTGCGCCTGGGCCAGATCCTGTGCGCAGGTGGCACCCCTAGTCCAATTCCTGACCCT
TCAGTAGCAACTGTTGCCACAGGGGAAAATGGCATAACGCAGATCAGCAGTACAGCAGAATCCTTTCAT
AAACAGAATGGAACTGGAACACCTCAGGTGGAAACAAACACCAGTGAGGATGGTGAAAGCTCTGGAGCC
AACGATAGTTTAAGAACACCTGAACAAGGATCTAATGGGACTGATGGGGCATCTCAAAAAACTCCCAGT
AGCACTGGGCCCAGTCCTGTGTTTGACATTAAAGCTGTTTCCATCAGTCCAACCAATGTGATCTTAACT
TGGAAAAGTAATGACACAGCTGCTTCTGAGTACAAGTATGTAGTAAAGCATAAGATGGAAAATGAGAAG
ACAATTACTGTTGTGCATCAACCATGGTGTAACATCACAGGCTTACGTCCAGCGACTTCATATGTATTC
TCCATCACTCCAGGAATAGGCAATGAGACTTGGGGAGATCCCAGAGTCATAAAAGTCATCACAGAGCCG
ATCCCAGTTTCTGATCTCCGTGTTGCCCTCACGGGTGTGAGGAAGGCTGCTCTCTCCTGGAGCAATGGC
AATGGCACTGCCTCCTGCCGGGTTCTTCTTGAAAGCATTGGAAGCCATGAGGAGTTGACTCAAGACTCA
AGACTTCAGGTCAATATCTCGGGCCTGAAGCCAGGGGTTCAATACAACATCAACCCGTATCTTCTACAA
TCAAATAAGACAAAGGGAGACCCCTTGGGCACAGAAGGTGGCTTGGATGCCAGCAATACAGAGAGAAGC
CGGGCAGGGAGCCCCACCGCCCCTGTGCATGATGAGTCCCTCGTGGGACCTGTGGACCCATCCTCCGGC
CAGCAGTCCCGAGACACGGAAGTCCTGCTTGTCGGGTTAGAGCCTGGCACCCGATACAATGCCACCGTT
TATTCCCAAGCAGCGAATGGCACAGAAGGACAGCCCCAGGCCATAGAGTTCAGGACAAATGCTATTCAG
GTTTTTGACGTCACCGCTGTGAACATCAGTGCCACAAGCCTGACCCTGATCTGGAAAGTCAGCGATAAC
GAGTCGTCATCTAACTATACCTACAAGATACATGTGGCGGGGGAGACAGATTCTTCCAATCTCAACGTC
AGTGAGCCTCGCGCTGTCATCCCCGGACTCCGCTCCAGCACCTTCTACAACATCACAGTGTGTCCTGTC
CTAGGTGACATCGAGGGCACGCCGGGCTTCCTCCAAGTGCACACCCCCCCTGTTCCAGTTTCTGACTTC
CGAGTGACAGTGGTCAGCACGACGGAGATCGGCTTAGCATGGAGCAGCCATGATGCAGAATCATTTCAG
ATGCATATCACACAGGAGGGAGCTGGCAATTCTCGGGTAGAAATAACCACCAACCAAAGTATTATCATT

View online »

GGTGGCTTGTTCCCTGGAACCAAGTATTGCTTTGAAATAGTTCCAAAAGGACCAAATGGGACTGAAGGG
GCATCTCGGACAGTTTGCAATAGAACTGTTCCCAGTGCAGTGTTTGACATCCACGTGGTCTACGTCACC
ACCACGGAGATGTGGCTGGACTGGAAGAGCCCTGACGGTGCTTCCGAGTATGTCTACCATTTAGTCATA
GAGTCCAAGCATGGCTCTAACCACACAAGCACGTATGACAAAGCGATTACTCTCCAGGGCCTGATTCCG
GGCACCTTATATAACATCACCATCTCTCCAGAAGTGGACCACGTCTGGGGGGACCCCAACTCCACTGCA
CAGTACACACGGCCCAGCAATGTGTCCAACATTGATGTAAGTACCAACACCACAGCAGCAACTTTAAGT
TGGCAGAACTTTGATGACGCCTCTCCCACGTACTCCTACTGCCTTCTTATTGAGAAGGCTGGAAATTCC
AGCAACGCAACACAAGTAGTCACGGACATTGGAATTACTGACGCTACAGTCACTGAATTAATACCTGGC
TCATCATACACAGTGGAGATCTTTGCACAAGTAGGGGATGGGATCAAGTCACTGGAACCTGGCCGGAAG
TCATTCTGTACAGATCCTGCGTCCATGGCCTCCTTCGACTGCGAAGTGGTCCCCAAAGAGCCAGCCCTG
GTTCTCAAATGGACCTGCCCTCCTGGCGCCAATGCAGGCTTTGAGCTGGAGGTCAGCAGTGGAGCCTGG
AACAATGCGACCCACCTGGAGAGCTGCTCCTCTGAGAATGGCACTGAGTATAGAACGGAAGTCACGTAT
TTGAATTTTTCTACCTCGTACAACATCAGCATCACCACTGTGTCCTGTGGAAAGATGGCAGCCCCCACC
CGGAACACCTGCACTACTGGCATCACAGATCCCCCTCCTCCAGATGGATCCCCTAATATTACATCTGTC
AGTCACAATTCAGTAAAGGTCAAGTTCAGTGGATTTGAAGCCAGCCACGGACCCATCAAAGCCTATGCT
GTCATTCTCACCACCGGGGAAGCTGGTCACCCTTCTGCAGATGTCCTGAAATACACGTATGACGATTTC
AAAAAGGGAGCCTCAGATACTTATGTGACATACCTCATAAGAACAGAAGAAAAGGGACGTTCTCAGAGC
TTGTCTGAAGTTTTGAAATATGAAATTGACGTTGGGAATGAGTCAACCACACTTGGTTATTACAATGGG
AAGCTGGAACCTCTGGGCTCCTACCGGGCTTGTGTGGCTGGCTTCACCAACATTACCTTCCACCCTCAA
AACAAGGGGCTCATTGATGGGGCTGAGAGCTATGTGTCCTTCAGTCGCTACTCAGATGCTGTTTCCTTG
CCCCAGGATCCAGGTGTCATCTGTGGAGCGGTTTTTGGCTGTATCTTTGGTGCCCTGGTTATTGTGACT
GTGGGAGGCTTCATCTTCTGGAGAAAGAAGAGGAAAGATGCAAAGAATAATGAAGTGTCCTTTTCTCAA
ATTAAACCTAAAAAATCTAAGTTAATCAGAGTGGAGAATTTTGAGGCCTACTTCAAGAAGCAGCAAGCT
GACTCCAACTGTGGGTTCGCAGAGGAATACGAAGATCTGAAGCTTGTTGGAATTAGTCAACCTAAATAT
GCAGCAGAACTGGCTGAGAATAGAGGAAAGAATCGCTATAATAATGTTCTGCCCTATGATATTTCCCGT
GTCAAACTTTCGGTCCAGACCCATTCAACGGATGACTACATCAATGCCAACTACATGCCTGGCTACCAC
TCCAAGAAAGATTTTATTGCCACACAAGGACCTTTACCGAACACTTTGAAAGATTTTTGGCGTATGGTT
TGGGAGAAAAATGTATATGCCATCATTATGTTGACTAAATGTGTTGAACAGGGAAGAACCAAATGTGAG
GAGTATTGGCCCTCCAAGCAGGCTCAGGACTATGGAGACATAACTGTGGCAATGACATCAGAAATTGTT
CTTCCGGAATGGACCATCAGAGATTTCACAGTGAAAAATATCCAGACAAGTGAGAGTCACCCTCTGAGA
CAGTTCCATTTCACCTCCTGGCCAGACCACGGTGTTCCCGACACCACTGACCTGCTCATCAACTTCCGG
TACCTCGTTCGTGACTACATGAAGCAGAGTCCTCCCGAATCGCCGATTCTGGTGCATTGCAGTGCTGGG
GTCGGAAGGACGGGCACTTTCATTGCCATTGATCGTCTCATCTACCAGATAGAGAATGAGAACACCGTG
GATGTGTATGGGATTGTGTATGACCTTCGAATGCATAGGCCTTTAATGGTGCAGACAGAGGACCAGTAT
GTTTTCCTCAATCAGTGTGTTTTGGATATTGTCAGATCCCAGAAAGACTCAAAAGTAGATCTTATCTAC
CAGAACACAACTGCAATGACAATCTATGAAAACCTTGCGCCCGTGACCACATTTGGAAAGACCAATGGT
TACATCGCC
ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC

Protein Sequence:

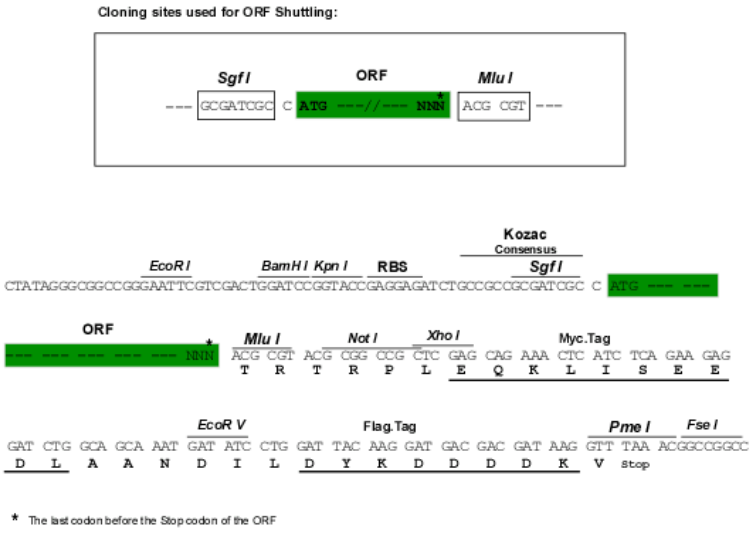
>Peptide sequence encoded by RC222707
Blue=ORF Red=Cloning site Green=Tag(s)

MKPAAREARLPPRSPGLRWALPLLLLLLRLGQILCAGGTPSPIPDPSVATVATGENGITQISSTAESFH
KQNGTGTPQVETNTSEDGESSGANDSLRTPEQGSNGTDGASQKTPSSTGPSPVFDIKAVSISPTNVILT
WKSNDTAASEYKYVVKHKMENEKTITVVHQPWCNITGLRPATSYVFSITPGIGNETWGDPRVIKVITEP
IPVSDLRVALTGVRKAALSWSNGNGTASCRVLLESIGSHEELTQDSRLQVNISGLKPGVQYNINPYLLQ
SNKTKGDPLGTEGGLDASNTERSRAGSPTAPVHDESLVGPVDPSSGQQSRDTEVLLVGLEPGTRYNATV
YSQAANGTEGQPQAIEFRTNAIQVFDVTAVNISATSLTLIWKVSDNESSSNYTYKIHVAGETDSSNLNV
SEPRAVIPGLRSSTFYNITVCPVLGDIEGTPGFLQVHTPPVPVSDFRVTVVSTTEIGLAWSSHDAESFQ
MHITQEGAGNSRVEITTNQSIIIGGLFPGTKYCFEIVPKGPNGTEGASRTVCNRTVPSAVFDIHVVYVT
TTEMWLDWKSPDGASEYVYHLVIESKHGSNHTSTYDKAITLQGLIPGTLYNITISPEVDHVWGDPNSTA
QYTRPSNVSNIDVSTNTTAATLSWQNFDDASPTYSYCLLIEKAGNSSNATQVVTDIGITDATVTELIPG
SSYTVEIFAQVGDGIKSLEPGRKSFCTDPASMASFDCEVVPKEPALVLKWTCPPGANAGFELEVSSGAW
NNATHLESCSSENGTEYRTEVTYLNFSTSYNISITTVSCGKMAAPTRNTCTTGITDPPPPDGSPNITSV
SHNSVKVKFSGFEASHGPIKAYAVILTTGEAGHPSADVLKYTYDDFKKGASDTYVTYLIRTEEKGRSQS
LSEVLKYEIDVGNESTTLGYYNGKLEPLGSYRACVAGFTNITFHPQNKGLIDGAESYVSFSRYSDAVSL
PQDPGVICGAVFGCIFGALVIVTVGGFIFWRKKRKDAKNNEVSFSQIKPKKSKLIRVENFEAYFKKQQA
DSNCGFAEEYEDLKLVGISQPKYAAELAENRGKNRYNNVLPYDISRVKLSVQTHSTDDYINANYMPGYH
SKKDFIATQGPLPNTLKDFWRMVWEKNVYAIIMLTKCVEQGRTKCEEYWPSKQAQDYGDITVAMTSEIV
LPEWTIRDFTVKNIQTSESHPLRQFHFTSWPDHGVPDTTDLLINFRYLVRDYMKQSPPESPILVHCSAG
VGRTGTFIAIDRLIYQIENENTVDVYGIVYDLRMHRPLMVQTEDQYVFLNQCVLDIVRSQKDSKVDLIY
QNTTAMTIYENLAPVTTFGKTNGYIA
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Recombinant protein using RC222707 also available, TP322707M

Restriction Sites: SgfI-MluI

Cloning Scheme:



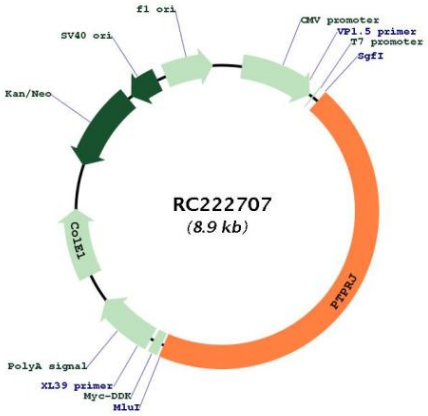
ACCN: NM_002843

ORF Size: 4011 bp

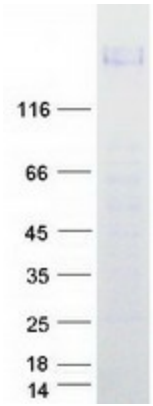
OTI Disclaimer:	Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery. 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_002843.2, NP_002834.2
RefSeq Size:	5119 bp
RefSeq ORF:	4014 bp
Locus ID:	5795
UniProt ID:	Q12913
Cytogenetics:	11p11.2
Domains:	Y_phosphatase, PTPc_motif, FN3
Protein Families:	Druggable Genome, Phosphatase, Transmembrane
Protein Pathways:	Adherens junction
MW:	145.9 kDa

Gene Summary: The protein encoded by this gene is a member of the protein tyrosine phosphatase (PTP) family. PTPs are known to be signaling molecules that regulate a variety of cellular processes, including cell growth, differentiation, mitotic cycle, and oncogenic transformation. This PTP possesses an extracellular region containing five fibronectin type III repeats, a single transmembrane region, and a single intracytoplasmic catalytic domain, and thus represents a receptor-type PTP. This protein is present in all hematopoietic lineages, and was shown to negatively regulate T cell receptor signaling possibly through interfering with the phosphorylation of Phospholipase C Gamma 1 and Linker for Activation of T Cells. This protein can also dephosphorylate the PDGF beta receptor, and may be involved in UV-induced signal transduction. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC222707



Coomassie blue staining of purified PTPRJ protein (Cat# [TP322707]). The protein was produced from HEK293T cells transfected with PTPRJ cDNA clone (Cat# RC222707) using MegaTran 2.0 (Cat# [TT210002]).