

Product datasheet for **RC200677**

PRCP (NM_005040) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PRCP (NM_005040) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PRCP
Synonyms:	HUMPCP; PCP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC200677 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGGGCCGCCGAGCCCTCCTGCTCTGTCTTTCTGTCCTTTCTGGCGCCTGGGCCACCATAGCCCTCCGGC
 CGGCCTTAAGGGCCCTCGGCAGCCTACACTTGCCAACCAACCCACATCCCTCCCGCTGTAGCCAAGAA
 CTATTCGGTTCTCTACTTCCAACAGAAGGTTGATCATTGTTGATTAATACTGTGAAAACTTTAATCAG
 CGGTACCTAGTAGCTGATAAACTGGAAGAAAAATGGTGGATCAATACTTTTCTACACTGGTAATGAAG
 GGGACATTATCTGGTTTTGTAATAACACGGGTTGATGTTGGGATGTGGCTGAGGAACTGAAAGCTATGTT
 GGTGTTTCTGACATCGATACTATGGAGAGTCTCTCCCTTTGGTGACAACTCATTCAAGGATCCAGA
 CACTTGAATTTCTGACATCAGAACAAGCTCTGGCTGATTTGCAGAGTTAATCAAACACTTGAAAAAGAA
 CAATCCCAGGAGCTGAAATCAACCTGTCATTGCCATAGGAGGCTCCTATGGTGGCATGCTTGCCGCTG
 GTTTAGGATGAAATATCCTCATATGGTAGTTGGAGCTCTTGCAGCTTCTGCCCTATCTGGCAGTTTGG
 GATTTAGTACCTTGTGGTGTATTTAAGATCGTAACTACAGATTTTAGGAAAAGCGGTCCACATTGTT
 CAGAGAGCATCCACAGGCTCTGGGATGCCATTAATCGACTCTCAAATACTGGCAGTGGTTTGCAGTGGCT
 TACTGGAGCCCTTCACTTATGCAGCCATTAACCTTCTCAGGACATCCAACATTTGAAAGACTGGATCTCT
 GAAACCTGGGTGAATCTGGCAATGGTGGACTATCCTTATGCCTCTAACTTTTACAGCCTTTGCCTGCTT
 GGCCTATCAAGGTAGTGTGCCAGTATTTGAAAAATCCCAATGTATCTGATCACTGCTGTCGAGAATAT
 TTTCAAGCTCTGAATGTATATTACAATTATTCGGGCCAGGTGAAATGCCTGAATATTTTACAGAGACGCA
 ACTAGCAGTCTGGGAACACTGGGTTGGAGCTATCAGGCCTGCACAGAAGTAGTCATGCCCTTTTGTACTA
 ATGGTGTGATGACATGTTTGAACCTCACTCATGGAACCTAAAGGAACCTTCTGATGACTGTTTCAACA
 GTGGGTTGTGAGACCAAGGCCCTCTGGATCACTACTATGTATGGAGGCAAAAACATTAGTTCACACACA
 AACATTGTTTTAGCAATGGTGAACCTAGACCCCTGGTCCAGGAGTGGAGTAACTAAGGATATCACAGACA
 CTCTGGTGTGAGTACCATCTCAGAGGGGGCCACCCTAGATCTCCGACCAAGAATGCCTGGATCC
 TATGTCTGTGCTTTAGCCCGCTCTTGGAAAGTTAGACATATGAAGAATTGGATCAGAGATTTCTATGAC
 AGTGCGGGAAAGCAGCAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC200677 protein sequence
 Red=Cloning site Green=Tags(s)

MGRRALLLLLLFLAPWATIALRPLRALGSLHLPNTSLPAVAKNYSVLVYFQQKVDHFGFNTVKTFNQ
 RYLVDKYYKKNNGSILFYTGNEGDIWFENNTGFMWDVAEELKAMLVFAEHRYYGESLPGDNSFKDSR
 HLNFLTSEQALADFAELIKHLKRTIPGAENQPVIAIGGSYGGMLAAWFRMKYPHMVVVGALAAAPWQFE
 DLVPCGVFMKIVTTDFRKSQPHCSSEIHRSDAINRLSNTGSLQWLTGALHLCSPITSQDIQHLKDWIS
 ETWVNLAMVDYPYASNFLQPLPAWPIKVVQYLNPNVSDSLLLQNIQALNVYYNYSQVYKLNISSETA
 TSSLGTLGWSYQACTEVVMPFCTNGVDDMFEPHSWNLKELSDDCFQWGVRRPWSWITMYGGKNISSHT
 NIVFSNGELDPWSGGVTKDITDLVAVTISEGAHHLDLRTKNALDPMSVLLARSLEVRHMKNWIRDFYD
 SAGKQH

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6418_c01.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:



ACCN: NM_005040

ORF Size: 1488 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_005040.4](#)

RefSeq Size: 2161 bp

RefSeq ORF: 1491 bp

Locus ID: 5547

UniProt ID: [P42785](#)

Cytogenetics: 11q14.1

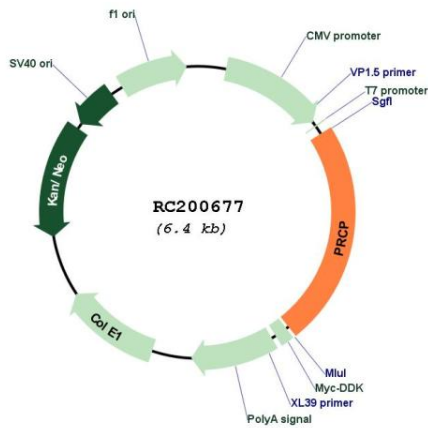
Domains: abhydrolase

Protein Families: Druggable Genome, Protease, Transmembrane

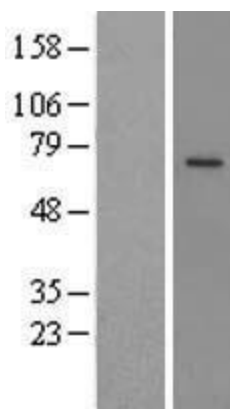
MW: 55.8 kDa

Gene Summary: This gene encodes a member of the peptidase S28 family of serine exopeptidases. The encoded preproprotein is proteolytically processed to generate the mature lysosomal prolylcarboxypeptidase. This enzyme cleaves C-terminal amino acids linked to proline in peptides such as angiotension II, III and des-Arg9-bradykinin. The cleavage occurs at acidic pH, but the enzyme activity is retained with some substrates at neutral pH. This enzyme has been shown to be an activator of the cell matrix-associated prekallikrein. The importance of angiotension II, one of the substrates of this enzyme, in regulating blood pressure and electrolyte balance suggests that this gene may be related to essential hypertension. A pseudogene of this gene has been identified on chromosome 2. Alternative splicing results in multiple transcript variants, at least one of which encodes an isoform that is proteolytically processed. [provided by RefSeq, Jan 2016]

Product images:



Circular map for RC200677



Western blot validation of overexpression lysate (Cat# [LY417565]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200677 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).