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Product datasheet for SC116956

PRCP (NM_005040) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PRCP (NM_005040) Human Untagged Clone
Tag:	Tag Free
Symbol:	PRCP
Synonyms:	HUMPCP; PCP
Mammalian Cell Selection:	None
Vector:	pCMV6-XL5
E. coli Selection:	Ampicillin (100 ug/mL)

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Fully Sequenced ORF:

>OriGene sequence for NM_005040 edited
GAATTCGGCACGAGGGTCTCCAGCCTGAGCCATGGGCCGCCGAGCCCTCCTGCTCCTGCT
TCTGTCTTTTCTGGCGCCCTGGGCCACCATAGCCCTCCGGCCGGCCTTAAGGGCCCTCGG
CAGCCTACACTTGCCAACCAACCCCACATCCCTCCCGGCTGTAGCCAAGAACTATTCGGT
TCTCTACTTCCAACAGAAGGTTGATCATTTTGGATTTAATACTGTGAAAACTTTTAATCA
GCGGTACCTAGTAGCTGATAAATACTGGAAGAAAAATGGTGGATCAATACTTTTCTACAC
TGGTAATGAAGGGGACATTATCTGGTTTTGTAATAACACGGGGTTCATGTGGGATGTGGC
TGAGGACCTGAAAGCTATGTTGGTGTTTGCTGAACATCGATACTATGGAGAGTCTCTCCC
CTTTGGTGACAACTCATTCAAGGATTCCAGACACTTGAATTTCCTGACATCAGAACAAGC
TCTGGCTGATTTTGCAGAGTTAATCAAACACTTGAAAAGAACAATCCCAGGAGCTGAAAA
TCAACCTGTCATTGCCATAGGAGGCTCCTATGGTGGCATGCTTGCCGCCTGGTTTAGGAT
GAAATATCCTCATATGGTAGTTGGAGCTCTTGCAGCTTCTGCCCCTATCTGGCAGTTTGA
GGATTTAGTACCTTGTGGTGTATTTATGAAGATCGTAACTACAGATTTTAGGAAAAGCGG
TCCACATTGTTCAGAGAGCATCCACAGGTCCTGGGATGCCATTAATCGACTCTCAAATAC
TGGCAGTGGTTTGCAGTGGCTTACTGGAGCCCTTCACTTATGCAGCCCATTAACTTCTCA
GGACATCCAACATTTGAAAGACTGGATCTCTGAAACCTGGGTGAATCTGGCAATGGTGGA
CTATCCTTATGCCTCTAACTTTTTACAGCCTTTGCCTGCTTGGCCTATCAAGGTAGTGTG
CCAGTATTTGAAAAATCCCAATGTATCTGATTCACTGCTGCTGCAGAATATTTTCCAAGC
TCTGAATGTATATTACAATTATTCGGGCCAGGTGAAATGCCTGAATATTTCAGAGACAGC
AACTAGCAGTCTGGGAACACTGGGTTGGAGCTATCAGGCCTGCACAGAAGTAGTCATGCC
CTTTTGTACTAATGGTGTCGATGACATGTTTGAACCTCACTCATGGAACTTAAAGGAACT
TTCTGATGACTGTTTTCAACAGTGGGGTGTGAGACCAAGGCCCTCCTGGATCACTACTAT
GTATGGAGGCAAAAACATTAGTTCACACACAAACATTGTTTTCAGCAATGGTGAACTAGA
CCCCTGGTCAGGAGGTGGAGTAACTAAGGATATCACAGACACTCTGGTTGCAGTCACCAT
CTCAGAGGGGGCCCACCACTTAGATCTCCGCACCAAGAATGCCTTGGATCCTATGTCTGT
GCTGTTAGCCCGCTCCTTGGAAGTTAGACATATGAAGAATTGGATCAGAGATTTCTATGA
CAGTGCGGGAAAGCAGCACTGAGAAACTTTTGATTGTTTTCAATTTCTTCTTTTATGTTC
ACACCACCACATTCCCATTCACTTTGATTTTCTACATGTAATTACCTTCTTTTGTTTATC
ATTAGATTTGATGGGGCCAAAGTTGAGATAGAATAGAGGGTGATGACGGTAAGAGCAAGT
GTCCCATGAATGTGATTTCCTGGGTTCTCACTGTCTTTGCACCACGTCTAGGAAGAATCT
TCTTGATAGCTCTCCCACACCATCAGTGGCCCTCATAACTGGAGTAGAGTTCCTGGTTGC
TTTTCATAAGAGGGAGAGTTACTTTCTTTGTATCTCTGCAAGCAGAGATTTCTCTTTGGT
TTTGAGGTTGAAGTGTCTTTGGCCCATTTGTAAGTCCCCATCCCTACCCTACACAAAGTA
AAAGCAGAAGATAGATAAAAAATGATGTAATTGCAGCTGGTAGGATGTCTGGTGCCAATC
CAGGAAGTGAGAGCCATTTCTTTTGTACCGGATTTAATGACTTTGAACTGTGCTGTAAAT
AAATAATACAGCTGGACCTTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAACTCGAC

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_005040 unedited
GGGTGTCANAATTGTAAACGACTCACTATAGGCGGCCGCGAATTCGCACGAGGGTCTCCA
GCCTGAGCCTGGGCCGCCGAGCCCTCCTGCTCCTGCTTCTGTCTTTTCTGGCGCCCTGGG
CCACCATAGCCCTCCGGCCGGCCTTAAGGGCCCTCGGCAGCCTACACTTGCCAACCAACC
CCACATCCCTCCCGGCTGTAGCCAAGAACTATTCGGTTCTCTACTTCCAACAGAAGGTTG
ATCATTTTGGATTTAATACTGTGAAAACTTTTAATCAGCGGTACCTAGTAGCTGATAAAT
ACTGGAAGAAAAATGGTGGATCAATACTTTTCTACACTGGTAATGAAGGGGACATTATCT
GGTTTTGTAATAACACGGGGTTCATGTGGGATGTGGCTGAGGACCTGAAAGCTATGTTGG
TGTTTGCTGAACATCGATACTATGGAGAGTCTCTCCCCTTTGGTGACAACTCATTCAAGG
ATTCCAGACACTTGAATTTCCTGACATCAGAACAAGCTCTGGCTGATTTTGCAGAGTTAA
TCAAACACTTGAAAAGAACAATCCCAGGAGCTGAAAATCAACCTGTCATTGCCATAGGAG
GCTCCTATGGTGGCATGCTTGCCGCCTGGTTTAGGATGAAATATCCTCATATGGTAGTTG
GAGCTCTTGCAGCTTCTGCCCCTATCTGGCAGTTTGAGGATTTAGTACCTTGGTGGTGTA
TTTATGAAAGATCGTAACTACAGATTNTAGGAAAAGCGGTCCACATTGTTCAGAGAGCAT
NCACAGGTCCTGGGATGCCATTAATCGACTCTCAAATACTGGCAGTGGTTTTGCAGTGGC
TTACTGGAGCCCTTCCTTATGCAGCCCATTAACTTCTCAGGACTCCACATTTGAAGNATG
G

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_005040 unedited
GGGGCGGCCGAANGNNNGNTCTCCCTTCNNNNNNNNGNNTTGCGTAGNCNCNCGGACCCG
CATTTTANGATCGAGTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT
TTTTTTTTTTTTAAAGGGCCCGCTGTTTTATTTATTTACCGCACAGTTCAAAGTCTTTAA
ATCCGGGCCAAAAAAAAGGGCTCTCACTTCCTGGATGGGCCCCAAACATCCTACCAGCTG
CAATTACATCATTTTTTATCTATCTTTTGCTTTTACTTTGGGGAGGGTAGGGAGGGGGAC
TTACAAAGGGGCCAAAAACCCTTTAACCTCAAAACCAAAAAAAAAATCTTTGCTTGCAAAA
ATACAAAAAAAAGTAACTCTCCCTTTTATGAAAAGCACCCCGGAACTCTTCTCCAGTTATG
AGGGCCCCTGATGGGGGGGGAAAGCTATCAAAAAAATTCTTCCTAAACGGGGGGCAAAGA
CAGGGAAAACCCAGGAAATCCATTCATGGGACACTTGCTCTTACCGTCATCACCCTCTAT
TTTATCTCAACTTTGGCCCCATCAAATCTAATGATAAACAAAAGAAGGTAATTACCTGTA
AAAAACCAAAGTGAATGGGAATGTGGTGGGTGTGAACCTAAAAGAAAAAATTGAAAACAC
TCAAAAGTTTCTCAGTGCTGCTTTCCCCGCCCTGTCATAAGAAATCTCTTGACCCAATTT
TTCATATGGCTTACCTTCCAAGGAGCGGGCTTAACAGCCCAAACATTTGATCCCAGGGCT
TTTTTGGTGCGGAAAACTAAAGGGGGGGGCCCCCTTTGAGATGGGGACTGCACCCCAGGG
GCGGGGAAACCCTTAGCTCACCCCCCTCCTGCCCAGGGGTTTATTTCCCCTTGGTGAAAA
CAAGTGTGGGGGGGAACCAGGGTTTTGCCCCCATCCAAANAAGGACCCCGGAGGCCTTTG
TTCTCCCCCCCCTGTGAAAACGCCTTCAAAAGGCCCTTTTAGTCCCTGGGGGGGGCCA

Restriction Sites: NotI-NotI

ACCN: NM_005040

Insert Size: 2140 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

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_005040.2, NP_005031.1
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
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] Transcript Variant: This variant (1) encodes isoform 1. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.