

Product datasheet for SC328728

PC1/3 (PCSK1) (NM_001177876) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PC1/3 (PCSK1) (NM_001177876) Human Untagged Clone
Tag:	Tag Free
Symbol:	PC1/3
Synonyms:	BMIQ12; NEC1; PC1; PC3; SPC3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC328728 representing NM_001177876. Blue=Insert sequence Red=Cloning site Green=Tag(s)

GCTCGTTTAGTGAACCGTCAGAATTTTGAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG
 GATCCGGTACCGAGGAGATCTGCCGCC**CGCATCGCC**
 ATGCTGGATGGCATTGTGACGGATGCTATTGAGGCCAGTTCAATTGGATTCAATCCTGGACACGTGGAT
 ATTTACAGTGCAAGCTGGGGCCCTAATGATGATGGGAAAAGTGTGGAGGGCCTGGCCGGCTAGCCAG
 AAGGCTTTTGAATATGGTGTCAAACAGACGAGCGCTGACCTGCACAATGACTGCACGGAGACGCACACA
 GGCACCTCGGCCCTGACACCTCTGGCTGCTGGCATCTTCGCTCTGGCCCTGGAAGCAAACCCAAATCTC
 ACCTGGCGAGATATGCAGCACCTGGTTGTCTGGACCTCTGAGTATGACCCGCTGGCCAATAACCTGGA
 TGGAAAAAGAATGGAGCAGGCTTGATGGTGAATAGTCGATTTGGATTTGGCTTGCTAAATGCCAAAGCT
 CTGGTGGATTTAGCTGACCCAGGACCTGGAGGAGCGTGCCTGAGAAGAAAGAGTGTGTTGTAAGGAC
 AATGACTTTGAGCCCAGAGCCCTGAAAGCTAATGGAGAAGTTATCATTGAAATCCAACAAGAGCTTGT
 GAAGGACAAGAAAATGCTATCAAGTCCCTGGAGCATGTACAATTTGAAGCAACAATTGAATATCCCGA
 AGAGGAGACCTTCATGTACACTTACTTCTGCTGCTGGAAGTACGACTGTGCTCTTGCTGAAAGAGAA
 CGGGATACATCTCCTAATGGCTTTAAGAATTGGGACTTCATGTCTGTTACACATGGGGAGAGAACCCT
 ATAGTACTTGGACTTTGAGAATTACAGACATGTCTGGAAGAATCAAAATGAAGGAAGAATTGTGAAC
 TGAAGCTGATTTTGCACGGGACCTCTTCTCAGCCAGAGCATATGAAGCAGCCTCGTGTACACGTCC
 TACAACACTGTTTCAAGATGACAGAAGAGGGGTGGAGAAGATGGTGGATCCAGGGGAGGAGCAGCCACA
 CAAGAGAACCCTAAGGAGAACACCCTGGTGTCCAAAAGCCCAGCAGCAGCGTAGGGGGCCGGAGG
 GATGAGTTGGAGGAGGGAGCCCTTCCCAGGCCATGCTGCGACTCCTGCAAAGTGCTTTCAAGTAAAAAC
 TCACCGCCAAAGCAATCACCAAAGAAGTCCCCAAGTGCAAAGCTCAACATCCCTTATGAAAACCTCTAC
 GAAGCCCTGGAAGAGCTGAACAAACCTTCCCAGCTTAAAGACTCTGAAGACAGTCTGTATAATGACTAT
 GTTGATGTTTTTATAACACTAAACCTTACAAGCACAGAGACGACCGGCTGCTTCAAGCTCTGGTGGAC
 ATTCTGAATGAGGAAAAT**TAA**
ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
 TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC


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Restriction Sites:	Sgfl-Mlul
ACCN:	NM_001177876
Insert Size:	1332 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).
OTI Annotation:	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
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:	<ol style="list-style-type: none"> 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:	<u>NM_001177876.1</u>
RefSeq Size:	4070 bp
RefSeq ORF:	1332 bp
Locus ID:	5122
Cytogenetics:	5q15
Protein Families:	Druggable Genome, Protease, Secreted Protein
MW:	49.3 kDa

Gene Summary:

This gene encodes a member of the subtilisin-like proprotein convertase family, which includes proteases that process protein and peptide precursors trafficking through regulated or constitutive branches of the secretory pathway. The encoded protein undergoes an initial autocatalytic processing event in the ER to generate a heterodimer which exits the ER and sorts to subcellular compartments where a second autocatalytic event takes place and the catalytic activity is acquired. The protease is packaged into and activated in dense core secretory granules and expressed in the neuroendocrine system and brain. This gene encodes one of the seven basic amino acid-specific members which cleave their substrates at single or paired basic residues. It functions in the proteolytic activation of polypeptide hormones and neuropeptides precursors. Mutations in this gene have been associated with susceptibility to obesity and proprotein convertase 1/3 deficiency. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene [provided by RefSeq, Jan 2014]

Transcript Variant: This variant (3) differs in the 5' UTR, lacks a portion of the 5' coding region, and initiates translation at a downstream start codon compared to variant 1. The encoded isoform (3) has a distinct N-terminus and is shorter than isoform 1.