

## Product datasheet for **SC323814**

### PCSK7 (NM\_004716) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	PCSK7 (NM_004716) Human Untagged Clone
Tag:	Tag Free
Symbol:	PCSK7
Synonyms:	LPC; PC7; PC8; SPC7
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC (PS100020)
E. coli Selection:	Ampicillin (100 ug/mL)

**Fully Sequenced ORF:** >OriGene sequence for NM\_004716.2  
 CACTGCTCCTCCGGCTCCCGGAAGCCGCGAGTTCCGCAGGGAGCGCGGCAGCTGCC  
 GCGGGCCGGTCTGTAGCCTTTGCTGAGTCAACTACTCACAGTGAAAGTGATGCCTTT  
 TCTCCATTTGCACAACATGAGTGTGACGTGGTTAGCCAGACCAGGAGCTCAACCTCATGT  
 AGAATCCAGTCCACTGCTCTGATGCCGAAGGGGAGGCAGAAAGTGCCACACTTGGATGCC  
 CCCCTGGGCTGCCACCTGCCTCTGGCTGGAATTAGCCGGGCTTTCTTACTGGTTCCC  
 TGGGTCATGGGCTGGCAGGGACAGGTGGGCTGATGGCCAGGGCACAGGGGGCCGAGC  
 TGGGCTGTGCACCTGGAAGCCTGGAAGGTGACGGGGAGGAAGAGACTCTGGAGCAGCAG  
 GCGGATGCCTTGGCCAGGCAGCAGGGCTGGTGAATGCTGGACGCATCGGAGAGCTTCAG  
 GGGCACTACCTTTGTCCAGCCTGCTGGGCACAGGCCGGCCCTGGAGGTGGAGGCCATC  
 CGGCAGCAGGTGGAGGCTGTGTTGGCTGGGCATGAAGCTGTGCGCTGGCACTCAGAGCAG  
 AGGCTGCTAAGGCGGGCCAAGCGCAGCGTCCACTTCAACGACCCCAAGTACCCGCAGCAA  
 TGGCACCTGAATAACCGACGGAGCCCGGCAGGGACATCAACGTGACGGGTGTGTGGAA  
 CGCAATGTGACTGGGCGAGGGGTGACGGTGGTGGTAGTGGATGACGGAGTGAACACACC  
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 CCTGACCCATGCCCCACCCGGATGTGGAGAATGGCAACCACCATGGCACGCGATGTGCA  
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 CGCATCGCAGGTATCCGGTACTGGATGGACCTCTCACAGACAGCATGGAGGCAGTGGCG  
 TTCAACAAGCACTATCAGATCAATGACATCTACAGCTGCAGCTGGGGACCAGATGACGAT  
 GGGAAGACAGTGGATGGCCCCATCAGCTTGAAAGGCTGCCTTACAACATGGGGTGATT  
 GCTGGTCCCGAGGCTTTGGGAGCATCTTTGTGGTAGCCAGTGGCAACGGAGGCCAACAC  
 AACGACAACGCAACTACGATGGCTACGCCAACTCCATCTACACCGTCACCATAGGAGCT  
 GTGGATGAGGAGGGACGCATGCCTTTCTATGCAGAAGAATGTGCCTCCATGCTGGCAGTC  
 ACCTTCAGTGGTGGGACAAGATGCTTCGGAGCATTGTGACCACTGACTGGGACCTTCAG  
 AAGGGCACTGGCTGCACTGAGGGCCACACAGGGACCTCAGCTGCAGCGCCTCTGGCAGCT  
 GGCATGATAGCCTTAATGCTGCAGGTGCGGCCCTGCCTCAGTGGCGTGACGTCCAGCAC  
 ATCATTGTCTTACAGCCACCCGGTATGAGGATGCCGTGCAGAGTGGGTACCAACGAG



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GCAGGCTTCAGCCATAGCCACCAGCACGGTTTCGGCCTCCTCAACGCCTGGAGGCTCGTG  
 AATGCAGCCAAGATCTGGACATCTGTCCCTTACTTAGCATCCTACGTCACTCCCCTGTTA  
 AAAGAAAACAAGGCGATTCCGCAGTCCCCCGTTCCCTGGAGGTCTGTGGAATGTCAGC  
 AGGATGGACCTGGAGATGTCAGGGCTGAAGACCTGGAGCATGTGGCAGTGACAGTCTCC  
 ATCACTCACCCACGGCGCGGCAGCTTGGAGCTGAAGCTGTTCTGCCCCAGTGGCATGATG  
 TCCCTCATCGGCGCCCCCGCAGCATGGACTCGGATCCCAACGGTTCATGACTGGACC  
 TTCTCCACTGTGGATGCTGGGGGAGAGAGCCGAGGGACCTACAGGCTTGTCACTCAGG  
 GATGTCCGGGATGAGTCATTCCAGGTCCGCATCCTCCGGCAATGGCAGCTGACCCTATAT  
 GGCTCTGTGTGGAGTGCAGTAGACATCAGGGACAGACAAAGGCTGTTAGAGAGTGCCATG  
 AGTGAAAATACCTGCACGATGACTTCGCCCTGCCCTGCCACCGGGGCTGAAAATTCCT  
 GAGGAAGATGGTTACACCATCACCCCAACACCCTCAAGACCCTGGTGCTGGTAGGCTGT  
 TTCACCGTCTTCTGGACTGTTTACTACATGCTGGAAGTATATTTGAGCCAGAGGAATGTG  
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 AAGGAGGAAGGGACAGAGCTAGAATCAGTGCCACTTTCAGCAGCAAGGATCCAGACGAA  
 GTGAAAACAGAGAGCAGGGGCCCTCCACCACCTGACCTCCTTGCCCCAGACCTGCTG  
 GAGCAAGGGGACTGGAGCCTGTCCAGAACAAGAGCGCCCTGGACTGCCCTCATCAGCAC  
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 GACAGGCTCTTCTTTCCAAAATTAGGGAGCTCTTGACAGAAAGCAGTTCTGATGCTTAC  
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 CAAATGGTGGAGGATTGCTGCCAGAGAAGTCTGGTCAGAGCCACAGGGTCTGCCTCCAGC  
 CAAACGGGAGCTTTTGGTGAGAAGGTGTTGGACAGGGGATTGGCGCCCCCTTTGGTTTG  
 GCCTCCATCCTCATCTCTTTGGGCCAAGCCAGCTGCCTAGGTCCCCAAGCATGGGGGA  
 CCCCTTCCACATATAAGTTGAGAAGGTGCCTGCCATAGCCAGGAGCGCATCTCAATGGA  
 AACATCACTGGGGTCACTTGGGAAGAGGACTTCGGGGTAGAGGCTGGGAGGAGCCCTGG  
 ACATGCCTGTCTGAAAGCGGCTGCCTCCATTATCCATTCCAAAGATGCCTGATCAGAAA  
 CCAACCATGAATGAACCCTGGCTCCTTACCACCCCCACGATTGGTATGATGCTGCCGG  
 CACAGCTGGGATACACACGGCTCCCCAGGCTGAGCTGCTTCACTAGGGAAATCTGCGG  
 CAGGACTGCAGAGCAGATGGCAGATGCACATGTTGGAGGAGAGGCTTGGGAGCCACTG  
 CCACTCCAGTCTGCCACCCTGTCTTCTCTGCAAGTCTCAGGAAATGGCCTTCC  
 CGCCGGAGGCCAGCTATCTGCCTGACAGGCTGTGACTTCTCTCAACCTTGGCCTTCTC  
 CCCTCTTCTGAGTAGTTGGTTGAATTTTTTTTAAATGCTTAAGATTTGTTTTTCTCTTT  
 CACAGCAACATTTTCTTGAATTTTTTTTCTGCACAGCTTTTCCAAAATAAAAACCTTCCAA  
 AAAAAAAAAAAAAAAAAA

- Restriction Sites:** ECoRI-NOT
- ACCN:** NM\_004716
- 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:**

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\\_004716.2](#), [NP\\_004707.2](#)

**RefSeq Size:** 3497 bp

**RefSeq ORF:** 2358 bp

**Locus ID:** 9159

**UniProt ID:** [Q16549](#)

**Cytogenetics:** 11q23.3

**Domains:** Peptidase\_S8, P\_proprotein

**Protein Families:** Druggable Genome, Protease, Transmembrane

**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. It encodes a type 1 membrane bound protease that is expressed in many tissues, including neuroendocrine, liver, gut, and brain. The encoded protein undergoes an initial autocatalytic processing event in the ER and then sorts to the trans-Golgi network through endosomes where a second autocatalytic event takes place and the catalytic activity is acquired. This gene encodes one of the seven basic amino acid-specific members which cleave their substrates at single or paired basic residues. It can process proalbumin and is thought to be responsible for the activation of HIV envelope glycoproteins gp160 and gp140. This gene has been implicated in the transcriptional regulation of housekeeping genes and plays a role in the regulation of iron metabolism. A t(11;14)(q23;q32) chromosome translocation associated with B-cell lymphoma occurs between this gene and its inverted counterpart. [provided by RefSeq, Feb 2014]