

Product datasheet for **SC310051**

PC6 (PCSK5) (NM_006200) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PC6 (PCSK5) (NM_006200) Human Untagged Clone
Tag:	Tag Free
Symbol:	PC6
Synonyms:	PC5; PC6; PC6A; SPC6
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene ORF within SC310051 sequence for NM_006200 edited (data generated by NextGen Sequencing)

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ATGGGCTGGGGAGCCGCTGCTGCTGCCCGGGACGTTTGGACCTGCTGTGCGTGCTGGCG
CTGCTCGGGGGCTGCCTGCTCCCCGTGTGTCGGACGCGCTACACCAACCACTGGGCA
GTCAAAATCGCCGGGGCTTCCCGGAGGCCAACCGTATCGCCAGCAAGTACGGATTATC
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TACAAGCTGAAAAACAATACCAGGATCTGTGTCTCCAGCTGCCCCCTGGCCACTACCAC
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CTCTTAGACTTAGGAATGTGCAAAATGGGAGCCATTTGCAAGGATGCAACGGAAGAGTCC
TGGGCGGAAGGAGGCTTCTGTATGCTTGTGAAAAGAACAATCTGTGCCAACGGAAGGTT
CTTCAACAACCTTTGCTGCAAAACATGTACATTTCAAGGCTGA

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Clone variation with respect to NM_006200.3

Restriction Sites: Please inquire

ACCN:	NM_006200
Insert Size:	3300 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_006200.2</u> , <u>NP_006191.2</u>
RefSeq Size:	3299 bp
RefSeq ORF:	2742 bp
Locus ID:	5125
UniProt ID:	<u>Q92824</u>
Cytogenetics:	9q21.13
Domains:	Peptidase_S8, P_protein, FU
Protein Families:	Druggable Genome, Protease, Secreted Protein

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. It then sorts to the trans-Golgi network where a second autocatalytic event takes place and the catalytic activity is acquired. This encoded protein is widely expressed and one of the seven basic amino acid-specific members which cleave their substrates at single or paired basic residues. It mediates posttranslational endoproteolytic processing for several integrin alpha subunits and is thought to process prorenin, pro-membrane type-1 matrix metalloproteinase and HIV-1 glycoprotein gp160. Alternative splicing results in multiple transcript variants, some of which encode distinct isoforms, including a protease packaged into dense core granules (PC5A) and a type 1 membrane bound protease (PC5B). [provided by RefSeq, May 2014]

Transcript Variant: This variant (2) lacks several 3' exons but contains an alternate 3' terminal exon, and it thus differs in the 3' coding region and 3' UTR, compared to variant 1. The resulting isoform (PC5A, alternatively referred to as the short form) has a substantially shorter and distinct C-terminus, compared to isoform PC5B.