

Product datasheet for **RC233003**

Proprotein Convertase 2 (PCSK2) (NM_001201529) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Proprotein Convertase 2 (PCSK2) (NM_001201529) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PCSK2
Synonyms:	NEC-2; NEC 2; NEC2; PC2; SPC2
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide Sequence:

>RC233003 representing NM_001201529
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGAAGGGTGGTTGTGTCTCCAGTGAAGGCGGCCGGGTTCTCTGTGTGTCATGGTTTTTGCAT
 CTGCTGAGCGACCGGTCTTCACGAATCATTCTTGTGGAGTTGCATAAAGGGGGAGAGGACAAAGCTCG
 CCAAGTTGCAGCAGAACACGGCTTTGGAGTCCGAAAGGTAAGATGGCTTTGCAGCAGGAAGGATTTGAC
 CGAAAAAGCGAGGTTACAGAGACATCAATGAGATCGACATCAACATGAACGATCCTCTTTTTACAAAGC
 AGTGGTATCTGATCAATACTGGGCAAGCTGATGGCACTCTGGCCTTGATTTGAATGTGGCTGAAGCCTG
 GGAGCTGGGATACACAGGAAAGGTGTTACCATTGGAATTATGGATGATGGGATTGACTATCTCCACCCG
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Protein Sequence:

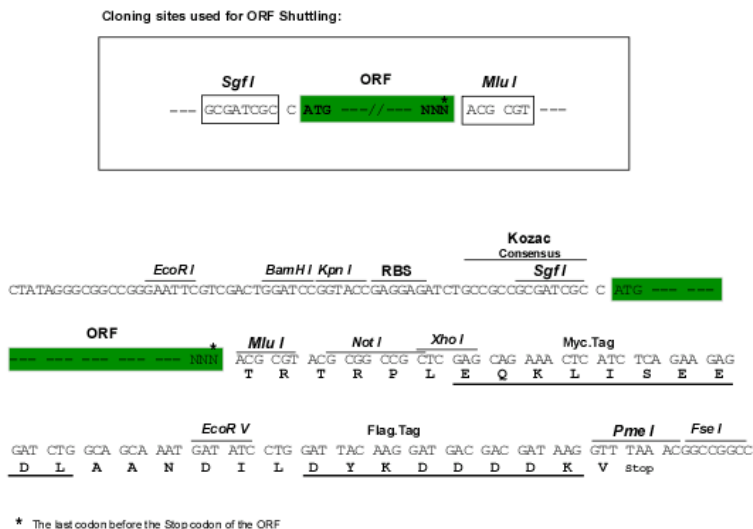
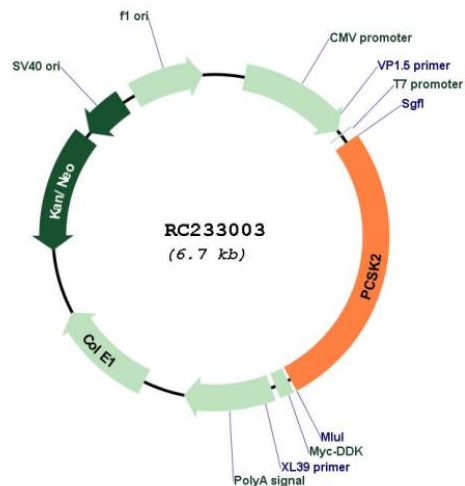
>RC233003 representing NM_001201529
 Red=Cloning site Green=Tags(s)

MKGGCVSQWKAAGFLFCVMVFASAERPVTNHFLLVHKGGEDKARQVAEEHGFVVRKVKMALQQEGFD
 RKKRGYRDINEIDINMNDPLFTKQWYLINTQADGTPGLDLNVAEAWELGYTGKGVITIGIMDDGIDYLHP
 DLASNYNAEASYDFSSNDPYPYPRYTDDWFNSHGTRCAGEVSAANNNICGVGVAYNSKVAGIRMLDQPF
 MTDIEASSISHMPQLIDIYSASWGPTDNGKTVDPRELTLQAMADGVNKGRRGKSIYVWASGDDGGSYD
 DCNCDGYASSMWTISINSAINDGRTALYDESCSSTLASTFSNGRKRNPAGVATTDLYGNCTLRHSGTSA
 AAPEAAGVFALALEANLGLTWRDMQHLTVLTSKRNLHDEVHQWRRNGVLEFNHLFGYGVLDAGAMVKM
 AKDWKTVPERFHCVGGSVQDPEKIPSTGKLVLTDDACEGKENFVRYLEHVQAVITVNAATRRGDLNINM
 TSPMGTKSILLRRPRDDSKVGFDPKPFMTTHTWGEDARGTWTLELGFVGSAPQKGVLEKWTMLMLHGTQ
 SAPYIDQVVRDYQSKLAMSKKEELEEELEAVERSLSILNKN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Plasmid Map:


ACCN: NM_001201529

ORF Size: 1809 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:	<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:	NM_001201529.3
RefSeq Size:	4687 bp
RefSeq ORF:	1812 bp
Locus ID:	5126
UniProt ID:	P16519
Cytogenetics:	20p12.1
Protein Families:	Druggable Genome, Protease, Secreted Protein
MW:	66.8 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 protein undergoes an initial autocatalytic processing event and interacts with a neuroendocrine secretory protein in the ER, exits the ER and sorts to secretory granules, where it is cleaved and catalytically activated during intracellular transport. The encoded 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. Single nucleotide polymorphisms in this gene may increase susceptibility to myocardial infarction and type 2 diabetes. This gene may also play a role in tumor development and progression. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. [provided by RefSeq, Jan 2014]