

Product datasheet for **RG230447**

PC1/3 (PCSK1) (NM_001177875) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PC1/3 (PCSK1) (NM_001177875) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PC1/3
Synonyms:	BMIQ12; NEC1; PC1; PC3; SPC3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>NM_001177875 ORF sequence, RG230447 may differ due to SNPs.
 Blue=ORF Red=Cloning site Green=Tag(s)

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GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGACTG
GATCCGGTACCGAGGAGATCTGCCGCCCGCATCGCC
ATGGGGAAGGGATCTATTTCTTTCTTTCTTTCCAGCCAAATGGTTCACCTGAAAATCACTACTTATTC
AAACATAAAAACACCCCAAGAGTCTCGAAGGAGTGCCTTTCATACACTAAGAGATTATCTGATGAT
GATCGTGTGATATGGGCTGAACAACAGTATGAAAAAGAAAGAAGTAAACGTTTCAGCTCTAAGGGACTCA
GCACTAAATCTCTTCAATGATCCCATGTGGAATCAGCAATGGTACTTGCAAGATACCAGGATGACGGCA
GCCCTGCCAAGCTGGACCTTCATGTGATACCTGTTTGGCAAAAAGGCATTACGGGCAAAGGAGTTGTT
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CCTGAGAAGAAAGAGTGTGTTGTAAGGACAATGACTTTGAGCCAGAGCCCTGAAAGCTAATGGAGAA
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CATATGAAGCAGCCTCGTGTGTACACGTCCTACAACACTGTTTCAAGTACAGAGAAGGGGTGGAGAAG
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CCCAGCAGCAGCAGCGTAGGGGGCCGGAGGGATGAGTTGGAGGAGGGAGCCCTTCCCAGGCCATGCTG
CGACTCCTGCAAAGTGTCTTTCAGTAAAAACTCACCGCAAAGCAATCACCAAAGAAGTCCCAAGTGCA
AAGCTCAACATCCCTTATGAAAACCTTCTACGAAGCCCTGGAAAAGCTGAACAAACCTTCCCAGCTTAAA
GACTCTGAAGACAGTCTGTATAATGACTATGTTGATGTTTTTATAACACTAAACCTTACAAGCACAGA
GACGACCGGCTGCTTCAAGCTCTGGTGGACATTCTGAATGAGGAAAAAT
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
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Protein Sequence: >Peptide sequence encoded by RG230447
 Blue=ORF Red=Cloning site Green=Tag(s)

MGKGSISFLFFSQIGSLENHYLFKHKNHPRRARRSAFHITKRLSDDDRVIWAEQQYEKERSKRSALRDS
 ALNLFNDPMMNQWYLQDTRMTAALPKLDLHVIPVWQGITGKGVVITVLDDGLEWNHTDIYANYDPEA
 SYDFNDNDHDPFRYDPTNENKHGTRCAGEIAMQANNHKCGVGVAYNSKVGIRMLDGIVTDAIEASSI
 GFNPGHVDIYSASWGPNDGKTVEGPGRLAQKAFEYGVKQGRQKGSIFVWASGNGGRQGDNCDCGYT
 DSIYTTISISSASQGLSPWYAEKCSSTLATSYSYSGDYTDQRITSADLHNDCTETHTGTSASAPLAAGIF
 ALALEANPNLTWRDMQHLVWVTSEYDPLANNPGWKNGAGLMVNSRFGFLLNAKALVDLADPRTWRSV
 PEKKECVYKDNDFEPRALKANGEVIEIPTRACEGQENAIKSLEHVQFEATIEYSRRGDLHVLTSAAG
 TSTVLLAERERDTPNGFKNWDFMSVHTWGENPIGTWTLRITDMSGRIQNEGRIVNWKILHGTSSQPE
 HMKQPRVYTSYNTVQNDRRGVEKMDVPGEEOPTQENPKENTLVSKSPSSSVGGRRDELEEGAPSQAML
 RLLQSAF SKNSPPKQSPKSPSAKLNIPYENFYEALEKLNKPSQLKDSEDSLYNDYVDVFYNTKPYKHR
 DDRLQLALVDILNEEN
 TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV
 MGYGFYHFGTYPSTYENPFLHAINNGGYTNTRIEKYEDGGVLHVFSYRYEAGRVIGDFKVMGTGFPEP
 SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFLRDGGYSSVVD SHMHFKSAIHPSILQNGGPMFA
 FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001177875

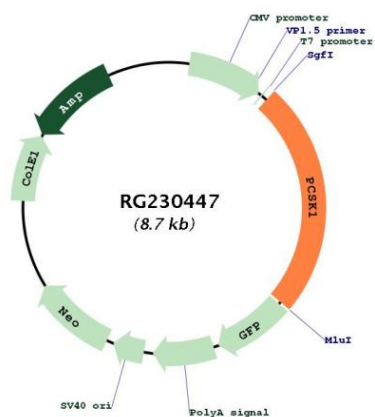
ORF Size: 2118 bp

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_001177875.2
RefSeq Size:	4828 bp
RefSeq ORF:	2121 bp
Locus ID:	5122
UniProt ID:	P29120
Cytogenetics:	5q15
Protein Families:	Druggable Genome, Protease, Secreted Protein
MW:	79 kDa
Gene Summary:	<p>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 even 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]</p>

Product images:



Circular map for RG230447