

## Product datasheet for **MG210088**

### **Pcsk9 (NM\_153565) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Pcsk9 (NM_153565) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Pcsk9
Synonyms:	AI415265; AI747682; FH3; HCHOLA3; Narc1; PC9
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>MG210088 representing NM\_153565  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGGGCACCCACTGCTCTGCGTGGCTGCGGTGGCCGCTGTTGCCGCTGTTGCCGCCGCTGCTGCTGCTGT  
 TGCTGCTACTGTGCCCCACCGCCGCTGGTGCCAGGACGAGGATGGAGATTATGAAGAGCTGATGCTCGC  
 CCTCCCGTCCCAGGAGGATGGCCTGGCTGATGAGGCCGCACATGTGCCACCGCCACCTTCGCGCGTTGC  
 TCCAAGGAGGCCTGGAGGCTGCCAGAACCTACATTGTGGTGTGATGGAGGAGACCCAGAGGCTACAGA  
 TTGAACAAACTGCCACCGCCTGCAGACCCGGGCTGCCCGCCGGGGCTATGTCATCAAGTTCTACATAT  
 CTTTTATGACCTTCCCTGGCTTCTTGGTGAAGATGAGCAGTGACCTGTTGGCCTGGCCCTGAAGTTG  
 CCCCATGTGGAGTACATTGAGGAAGACTCCTTTGTCTTCGCCAGAGCATCCCATGGAACCTGGAGCGAA  
 TTATCCCAGCATGGCACCAGACAGAGGAAGACCGCTCCCTGATGGAAGCAGCCAGGTGGAGGTGTATCT  
 CTTAGATACCAGCATCCAGGGTGGCCATCGGGAGATTGAGGGCAGGGTCACCATCACCGACTTCAACAGC  
 GTGCCGAGGAGGATGGGACACGCTCCACAGACAGGCGAGCAAGTGTGACAGCCACGGCACCCACCTGG  
 CAGGTGTGGTCAGCGGCCGGGATGCTGGTGTGGCCAAGGGCACAGCCTGCACAGCCTGCGTGTGCTCAA  
 CTGTCAAGGGAAGGGCACAGTCAGCGGCACCCATAGGCCTGGAGTTTATTTCGGAAGAGTCAGCTAATC  
 CAGCCCTCGGGGCCACTCGTGGTTCTGCTGCCCTGGCCGGTGGGTATAGCCGCATCCTCAACGCTGCC  
 GCCGGCACCTGGCGAGGACTGGGGTGGTGTGTTGCAGCAGCTGGGAACCTTCGGGACGACGCCTGCC  
 CTACTCCCAGCTTCTGCTCCAGAGTGCATCACAGTCGGGGCCACGAATGCCAGGACCGCAGTTACC  
 TTGGGGACTTTGGGGACTAATTTTGGACGCTGTGTGGATCTTTTGGCCCCGGGAAGGACATCATCGGAG  
 CGTCCAGTGACTGCAGCACATGCTTCATGTCACAGAGTGGGACCTCACAGGCTGCTGCCACGTGGCCGG  
 CATTGTGGCTCGGATGCTGAGCCGGGAGCCACACTTACCCTGGCCGAGCTGCGGCAGAGGCTGATCCAC  
 TTCTCTACCAAAGACGTATCAACATGGCCTGGTTCCTGAGGACCAGCAGGTGCTGACCCCAACCTGG  
 TGGCCACTGCCCCCAGCACCATGAGACAGGCGGGCAGTGTCTGTAGGACGGTGTGGTTCGGCACA  
 CTCGGGGCCACTCGAACAGCTACAGCTACAGCCCGCTGTGCCCAAGAGGAGGCTGCTGAGCTGCTCC  
 AGCTTCTCCAGGAGCGGGAGGCGTCTGGTGGTGGATTGAGGCCATAGGAGGCCAGCAGGTCTGCAAGG  
 CCCTCAATGCATTTGGGGTGGGGTGTCTATGCCGTCGCGAGATGCTGCCTGGTTCCTCCGTCGCAACTG  
 CAGCATCCACAACACCCCTGCAGCCAGAGCTGGCCTGGAGACCCATGTCCACTGCCACCAGAAGGACCAT  
 GTTCTCACAGGCTGCAGCTTCCATTGGGAAGTGAAGACCTTAGTGTCCGGAGGCAGCCTGCGCTGAGGT  
 CCAGAGCTCAGCCTGGCCAGTGGTGGCCACAGGCGGCCAGTGTCTATGCTTCCCTGCTGCCATGCCCC  
 AGGGCTGGAATGCAAAATCAAGGAGCATGGGATCTCAGGTCTTCAGAGCAGGTCAGTGTGGCCTGCGAA  
 GCAGGATGGACCTGACTGGATGCAATGTGCTCCCTGGGGCATCCCTCACTCTGGGAGCTACAGCGTGG  
 ACAACCTGTGTGGCAAGAGTCCATGACACTGCCAGAGCAGACAGGACCAGTGGAGAAGCCACAGTAGC  
 TGCTGCCATCTGCTGCCGGAGCCGGCCTTCAGCAAAGGCTCCTGGGTTCCAG

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >MG210088 representing NM\_153565  
 Red=Cloning site Green=Tags(s)

MGTHCSAWLRWPLLPLLPLLLLLLLLLPTGAGAQDEEDGDYEELMLALPSQEDGLADEAAHVATATFRRC  
 SKEAWRLPGTYIVLMEETQRLQIEQTAHRLQTRAARRGYVIVKLVHIFYDLFPGFLVKMSSDLLGLALKL  
 PHVEYIEEDSFVFAQSIPWNLERIIIPAWHQTEEDRSPDGSSQVEVYLLDTSIQGAHREIEGRVTITDFNS  
 VPPEEDGTRFHRQASKCDSHGTHLAGVVSGRDAGVAKGTSLSLHSLRVLNLCQKGTVSGTLIGLEFIRKSQLI  
 QPSGPLVVLLPLAGGYSRILNAACRHLARTGVVLYAAAGNFRDDACL YSPASAPEVITVGATNAQDQPVT  
 LGTLGTNFGRCVDL FAPGKDIIGASSDCSTCFMSQSGTSQAAAHVAGIVARMLSREPTLTLAELRQLIH  
 FSTKDVINMAWFPEDQQVLTPNLVATLPPSTHETGGQLLCRTVWSAHS GPTRTATATARCAPEEELLSCS  
 SFSRSRRRRGDWIEAIGGQQVCKALNAFGGEGVYAVARCCLVPRANCSIHNTPAARAGLETHVHCHQKDH  
 VLTGCSFHWEVEDLSVRRQPALRSRRQPQC VGHQAASVYASCCHAPGLECKIKEHGISGPSEQVTVACE  
 AGWTLTGCNVLPGASLT LGAYSVDNLCVARVHDTARADRTSGEATVAAAICCRSRPSAKASWVQ

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_153565

**ORF Size:** 2082 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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:**

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\\_153565.2](#), [NP\\_705793.1](#)

**RefSeq Size:** 3512 bp

**RefSeq ORF:** 2085 bp

**Locus ID:** 100102

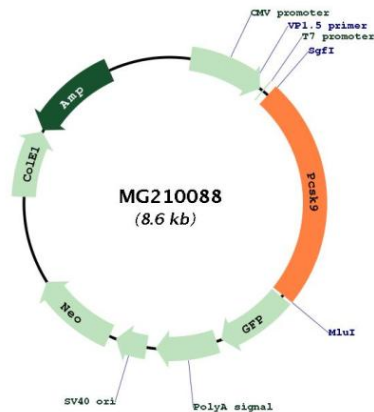
**UniProt ID:** [Q80W65](#)

**Cytogenetics:** 4 C7

**Gene Summary:**

Crucial player in the regulation of plasma cholesterol homeostasis. Binds to low-density lipid receptor family members: low density lipoprotein receptor (LDLR), very low density lipoprotein receptor (VLDLR), apolipoprotein E receptor (LRP1/APOER) and apolipoprotein receptor 2 (LRP8/APOER2), and promotes their degradation in intracellular acidic compartments. Acts via a non-proteolytic mechanism to enhance the degradation of the hepatic LDLR through a clathrin LDLRAP1/ARH-mediated pathway. May prevent the recycling of LDLR from endosomes to the cell surface or direct it to lysosomes for degradation. Can induce ubiquitination of LDLR leading to its subsequent degradation. Inhibits intracellular degradation of APOB via the autophagosome/lysosome pathway in a LDLR-independent manner. Involved in the disposal of non-acetylated intermediates of BACE1 in the early secretory pathway. Inhibits epithelial Na(+)-channel (ENaC)-mediated Na(+) absorption by reducing ENaC surface expression primarily by increasing its proteasomal degradation. Regulates neuronal apoptosis via modulation of LRP8/APOER2 levels and related anti-apoptotic signaling pathways.[UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MG210088