OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RG213553

PACE4 (PCSK6) (NM_138320) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PACE4 (PCSK6) (NM_138320) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PCSK6
Synonyms:	PACE4; SPC4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

View online »

ORF Nucleotide Sequence:

>RG213553 representing NM_138320
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCCTCCGCGCGCGCCGCCTGCGCCCGGGCCCCGGCCGCCGCCCCGGGCCGCCGCCGCCACCGACACCG
CCGCGGGCGCGGGGGGCGCGGGGGGCGCGGGGGGCGCCGGCGGGCCCGGGTTCCGGCCGCTCGCGCCGCG
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CTGGATGCATATTTGTTGGGTCCCTGCTGTGGGCAGACACCGTGCAGCAGCGGGA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG213553 representing NM_138320
Red=Cloning site Green=Tags(s)

MPPRAPPAPGPRPPPRAAAATDTAAGAGGAGGAGGAGGPGFRPLAPRPWRWLLLLALPAACSAPPPRPVY
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VSPSGTKSQLLAKRLLDLSNEGFTNWEFMTVHCWGEKAEGQWTLEIQDLPSQVRNPEKQGKLKEWSLILY
GTAEHPYHTFSAHQSRSRMLELSAPELEPPKAALSPSQVEVPEDEEDYTAQSTPGSANILQTSVCHPECG
DKGCDGPNADQCLNCVHFSLGSVKTSRKCVSVCPLGYFGDTAARRCRRCHKGCETCSSRAATQCLSCRRG
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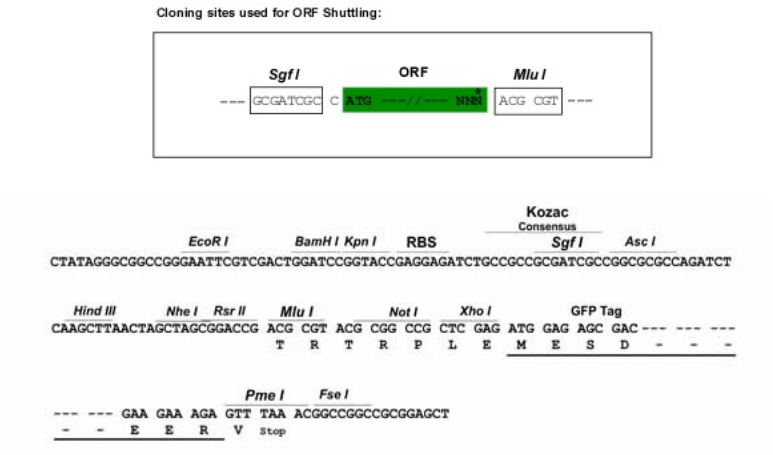
ELIRCGECHHTCGTCVGPGREECIHCAKNFHFHDWKCVPACGEGFYPEEMPGLPHKVCRRYGPPGGERQA
AVSSKGVPGGQSLAASSPGAGEGMLHHPTVDRSPFTELLRGLRPFVHWMHICWVPAVGRHRAAAG

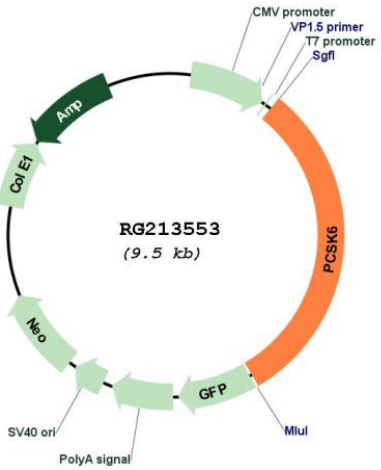
TRTRPLE – GFP Tag – V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN:	NM_138320
ORF Size:	2925 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:	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_138320.1, NP_612193.1
RefSeq Size:	3372 bp
RefSeq ORF:	2927 bp
Locus ID:	5046
Cytogenetics:	15q26.3

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 and sorts to the trans-Golgi network where a second autocatalytic event takes place and the catalytic activity is acquired. The encoded protease is constitutively secreted into the extracellular matrix and expressed in many tissues, including neuroendocrine, liver, gut, and brain. This gene encodes one of the seven basic amino acid-specific members which cleave their substrates at single or paired basic residues. Some of its substrates include transforming growth factor beta related proteins, proalbumin, and von Willebrand factor. This gene is thought to play a role in tumor progression and left-right patterning. Alternatively spliced transcript variants encoding different isoforms have been identified. [provided by RefSeq, Feb 2014]