

Product datasheet for **RC213553**

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:	Myc-DDK
Symbol:	PACE4
Synonyms:	PACE4; SPC4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC213553 representing NM_138320
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCCTCCGCGCGCGCCGCTGCGCCCGGGCCCGCGCGCCCGGGCCGCGCCGCCACCGACACCG
 CCGCGGGCGCGGGGGCGCGGGGGCGCGGGGGCGCGGGGGCCGGTTCCGGCCGCTCGCGCCGCG
 TCCTGGCGCTGGCTGCTGCTGCTGGCGCTGCCTGCCGCTGCTCCGCGCCCCCGCGCGCCCGCTAC
 ACCAACCACTGGGCGGTGCAAGTCTGGGCGGCCCGGCCGAGGCGGACCGGTGGCGGGCGCACGGGT
 ACCTCACTTGGGCCAGATTGGAACCTGGAAGTACTACCATTTTTATCACAGCAAACCTTTAAAG
 ATCAACCTTGAGTAGCAGAGGCCCTCACACCTTCTCAGAATGGACCCCAAGTGAATGGCTCCAGCAA
 CAGGAAGTGAACGAAGGTGAAGAGACAGGTGCGAAGTACCCGCAGGCCCTTTACTTCAACGACCCCA
 TTTGGTCCAACATGTGGTACCTGCATTGTGGCGACAAGAAGTGCCTGCCGGTCCGAAATGAATGTCCA
 GGCAGCGTGAAGAGGGCTACACAGAAAAAACGTGGTGGTACCATCCTTGATGATGGCATAGAGAGA
 AATCACCTGACCTGGCCCCAAATTATGATTCCTACGCCAGCTACGACGTGAACGGCAATGATTATGACC
 CATCTCCACGATATGATGCCAGCAATGAAAATAAACACGGCACTCGTTGTGCGGGAGAAGTTGCTGCTTC
 AGCAAACAATTCCTACTGCATCGTGGGCATAGCGTACAATGCCAAAATAGGAGGCATCCGCATGCTGGAC
 GGCGATGTCACAGATGTGGTCGAGGCAAAGTGCCTGGGCATCAGACCCAACTACATCGACATTTACAGTG
 CCAGCTGGGGGCCGACGACGACGGCAAGACGGTGGACGGGCCCGGGCGACTGGCTAAGCAGGCTTTTCA
 GTATGGCATTAAAAAGGGCCGCGCAGGGCCTGGCTCCATTTTCTGCTGGGCATCTGGAAATGGCGGGAGA
 GAGGGGGACTACTGCTCGTGGATGGCTACACCAACAGCATACACCATCTCCGTCAGCAGCGCCACCG
 AGAATGGCTACAAGCCCTGGTACCTGGAAGAGTGTCCACCCCTGGCCACCCTACAGCAGTGGGGC
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 ACGTCCAGCACCTGCTAGTGAAGACATCCCGGCCGCCACCTGAAAGCGAGCGACTGAAAGTGAACGG
 CGCGGGTCATAAAGTTAGCCATTTCTATGGATTTGGTTTGGTGGACGAGAAGCTCTCGTTGTGGAGGCA
 AAGAAGTGGACAGCAGTCCATCGCAGCACATGTGTGGCCGCTCGGACAAGAGACCCAGGAGCATCC
 CCTTAGTGCAGGTGCTGCGGACTACGGCCTGACCAGCGCTGCGCGGAGCACTCGGACCAGCGGGTGGT
 CTACTTGGAGCACGTGGTGGTTCGCACCTCCATCTCACACCCACGCCGAGGAGACCTCCAGATCTACCTG
 GTTTCTCCCTCGGGAACCAAGTCTCAACTTCTGGCAAAGAGGTTGCTGGATCTTTCCAATGAAGGGTTTA
 CAAACTGGGAATTCATGACTGTCCACTGCTGGGAGAAAAGGCTGAAGGGCAGTGGACCTTGAAATCCA
 AGATCTGCCATCCAGGTCCGCAACCCGGAGAAGCAAGGGAAGTTGAAAGAATGGAGCCTCATACTGTAT
 GGCACAGCAGAGCACCCGTACCACACTTCAGTGCCTCAGTCCCGCTCGCGGATGCTGGAGCTCTCAG
 CCCCAGAGCTGGAGCCACCAAGGCTGCCTGTACCCTCCAGGTGGAAGTTCTGAAGATGAGGAAGA
 TTACACAGCTCAATCCACCCAGGCTCTGCTAATATTTTACAGACCAGTGTGTGCCATCCGGAGTGTGGT
 GACAAAGGCTGTGATGGCCCAATGCAGACCAGTGTGAACTGCGTCCACTTCAGCCTGGGGAGTGTCA
 AGACCAGCAGGAAGTGCCTGAGTGTGTGCCCTTGGGCTACTTTGGGGACACAGCAGCAAGACGCTGTCCG
 CCGGTGCCACAAGGGGTGTGAGACCTGCTCCAGCAGAGCTGCGACGCAGTGCCTGTCTTGGCCCGCGGG
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 AGAAAAATTCCTTAAATGCCACCAAGCTGTAAAAAGTGCCTGGATGAACCTGAGAAATGTACTGTCTG
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 GAGCTGATCAGATGTGGGAATGCCATCACACTGCGGAACCTGCGTGGGGCCAGGCAGAGAAGAGTGCA
 TTCCTGTGCGAAAAACTTCCACTTCCACGACTGGAAGTGTGTGCCAGCCTGTGGTGAAGGCTTCTACCC
 AGAAGAGATGCCGGCTTCCCCACAAAGTGTGTCGAAGTACGGTCTCCTGGCGGGAAACGGCAGGCA
 GCTGTGTCAGCAAAAGGAGTGCCTGGAGGGCAGAGTCTGGCAGCATCTTCCCAGGGGCCGGGAGGGCA
 TGTTGCATCACCCACTGTGGACAGGAGCCATTTACAGAGCTGCTGAGGGCCCTTCGTCCTTTGTTCA
 CTGGATGCATATTTGTTGGTCCCTGCTGTGGCAGACACCGTGCAGCAGCGGGA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC213553 representing NM_138320
 Red=Cloning site Green=Tags(s)

MPPRAPPAGPRPPPRAAAAATDTAAGAGGAGGAGGAGGPGFRPLAPRPWRWLLLLALPAACSAPPRPVY
 TNHWAQVQLGGPAEADRVAAAHGYLNLGQIGNLEDYYHFYHSKTFKRSTLSSRGPHTFLRMDPQVKWLQQ
 QEVKRRVKRQVRSDPQALYFNDP IWSNMWYLHCGDKNSRCRSEMNVQAAWKRGYTGKNNVVITLDDGIER
 NHPDLAPNYDSYASYDVNGNDYDPSRYDASNENKHGTRCAGEVAASANNYSYCVGIAYNAKIGGI RMLD
 GDVTDVVEAKSLGIRPNYIDIYSASWGPDDDGKTVDGPGRLAKQAFEYGIKKGRQLGSIFVWASNGGR
 EGDYCSCDGYTNSIYTTISVSSATENGYKPWYLEECASLTATTYSSGAFYERKIVTTDLRQRCTDGHGTGS
 VSAPMVAGIIALALEANSQLTWRDVQHLLVKTSRPAHLKASDWKVNAGHKVSHFYGFGLVDAEALVVEA
 KKWTAVPSQHMCVAASDKRPRSIPLVQVLRRTALTSAEHSQDQVVYLEHVVVVRTSISHPRRGDLQIYL
 VSPSGTKSLLAKRLDL SNEGF TNWFM TVHCWGEKAEGQWTL EIQDLPSQVRNPEKQGLKKEWSLILY
 GTAEHPYHTFSAHQSRSMLELSAPELEPPKAALSPSQVEVPEDEEDYTAQSTPGSANILQTSVCHPECG
 DKGCDGPNADQCLNCVHFSLGSVKT SRKCVSVCPLGYFGDTAARRCRRCHKGCETCSSRAATQCLSCRGG
 FYHHQEMNTCVTLCPAGFYADESQKNCLKCHPSCKKCVDEPEKCTVCKEGFSLARGSCIPDCEPGTYFDS
 ELIRCGECHHTCGTCVGPREECIHCAKNFHFHDWKVPACGEGFYPEEMPGLPHKVCRRYVPPGGERQA
 AVSSKGVPGGQSLAASSPGAGEMLHHPTVDRSPFTELLRGLRPFVHMWHICWVPAVGRHRAAAG

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8012_b10.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



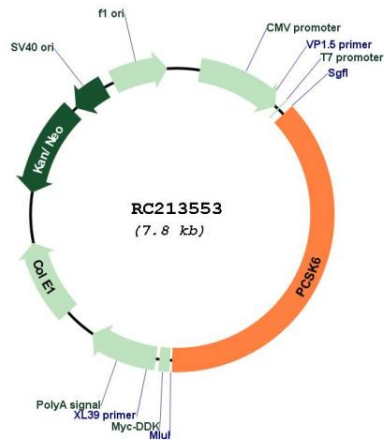
* The last codon before the Stop codon of the ORF

ACCN: NM_138320

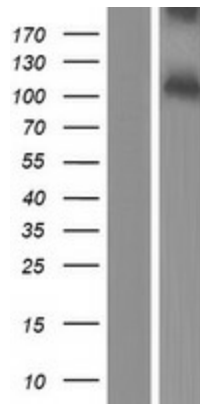
ORF Size: 2925 bp

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:	<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_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
MW:	100.6 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 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]

Product images:



Circular map for RC213553



Western blot validation of overexpression lysate (Cat# [LY408701]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC213553 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).