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Product datasheet for RC214231

PRSS2 (NM_002770) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PRSS2 (NM_002770) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PRSS2
Synonyms:	TRY2; TRY8; TRYP2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC214231 representing NM_002770
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAATCTACTTCTGATCCTTACCTTTGTTGCAGCTGCTGTTGCTGCCCCCTTTGATGATGATGACAAGA
TCGTTGGGGGCTACATCTGTGAGGAGAATTCTGTCCCCTACCAGGTGTCCTTGAATTCTGGCTACCACTT
CTGCGGTGGCTCCCTCATCAGCGAACAGTGGGTGGTGTCAGCAGGTCACTGCTACAAGTCCCGCATCCAG
GTGAGACTGGGAGAGCACAACATCGAAGTCCTGGAGGGGAATGAACAGTTCATCAATGCAGCCAAGATCA
TCCGCCACCCCAAATACAACAGCCGGACTCTGGACAATGACATCCTGCTGATCAAGCTCTCCTCACCTGC
CGTCATCAATTCCCGCGTGTCCGCCATCTCTCTGCCCACTGCCCCTCCAGCTGCTGGCACCGAGTCCCTC
ATCTCCGGCTGGGGCAACACTCTGAGTTCTGGTGCCGACTACCCAGACGAGCTGCAGTGCCTGGATGCTC
CTGTGCTGAGCCAGGCTGAGTGTGAAGCCTCCTACCCTGGAAAGATTACCAACAACATGTTCTGTGTGGG
CTTCCTCGAGGGAGGCAAGGATTCCTGCCAGGGTGATTCTGGTGGCCCTGTGGTCTCCAATGGAGAGCTC
CAAGGAATTGTCTCCTGGGGCTATGGCTGTGCCCAGAAGAACAGGCCTGGAGTCTACACCAAGGTCTACA
ACTATGTGGACTGGATTAAGGACACCATAGCTGCCAACAGC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

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Protein Sequence:

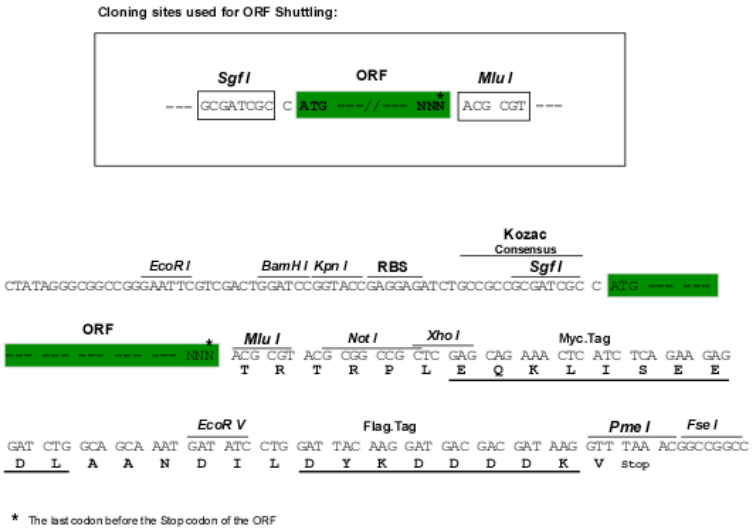
>RC214231 representing NM_002770
Red=Cloning site Green=Tags(s)

MNLLLILTFVAAAVAAPFDDDDKIVGGYICEENSVPYQVSLNSGYHFCGGSLISEQWVVSAGHCYKSRIQ
VRLGEHNIEVLEGNEQFINAAKIIRHPKYNSRTLDNDILLIKLSSPAVINSRVSAISLPTAPPAAGTESL
ISGWGNTLSSGADYPDELQCLDAPVLSQAECEASYPGKITNNMFCVGFLEGGKDSCQGDSGGPVVSNGEL
QGIVSWGYGCAQKNRPGVYTKVYNYVDWIKDTIAANS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_002770

ORF Size: 741 bp

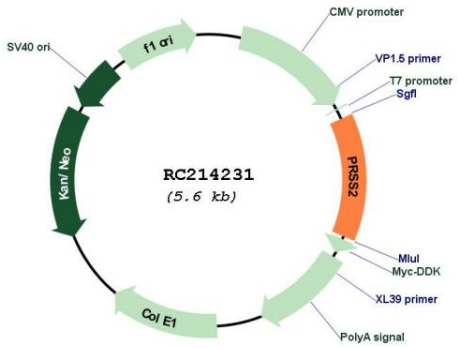
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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_002770.2, NP_002761.1
RefSeq Size:	802 bp
RefSeq ORF:	744 bp
Locus ID:	5645
UniProt ID:	P07478
Cytogenetics:	7q34
Protein Families:	Druggable Genome, Secreted Protein
Protein Pathways:	Neuroactive ligand-receptor interaction
MW:	26.49 kDa
Gene Summary:	This gene belongs to the trypsin family of serine proteases and encodes anionic trypsinogen. It is part of a cluster of trypsinogen genes that are located within the T cell receptor beta locus. Enzymes of this family cleave peptide bonds that follow lysine or arginine residues. This protein is found at high levels in pancreatic juice and its upregulation is a characteristic feature of pancreatitis. This protein has also been found to activate pro-urokinase in ovarian tumors, suggesting a function in tumor invasion. In addition, this enzyme is able to cleave across the type II collagen triple helix in rheumatoid arthritis synovitis tissue, potentially participating in the degradation of type II collagen-rich cartilage matrix. Alternative splicing results in multiple transcript variants.[provided by RefSeq, Jan 2015]

Product images:



Circular map for RC214231