

Product datasheet for RC214372

PRSS21 (NM_144956) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PRSS21 (NM_144956) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PRSS21
Synonyms:	ESP-1; ESP1; TEST1; TESTISIN
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC214372 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGCGCGCGGGGCGCTGCTGCTGGCGCTGCTGCTGGCTCGGGCTGGACTCAGGAAGCCGGAGTCGC
AGGAGGCGGCGCCCTTATCAGGACCATGCGGCCGACGGGTATCACGTCGCGCATCGTGGGTGGAGAGGA
CGCCGAACCTCGGGCGTTGGCCGTGGCAGGGGAGCCTGCGCCTGTGGGATCCCACGTATGCGGAGTGAGC
CTGCTCAGCCACCCTGGCACTCACGGCGGCGCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCT
CCGGGTGGATGGTCCAGTTTGGCCAGCTGACTTCCATGCCATCCTTCTGGAGCCTGCAGGCCTACTACAC
CGTTACTTCGTATCGAATATCTATCTGAGCCCTCGCTACCTGGGGAATTCACCCATGACATTGCCTTG
GTGAAGCTGTCTGCACCTGTCACCTACACTAAACACATCCAGCCCATCTGTCTCCAGGCCTCCACATTTG
AGTTTGAGAACCAGGACAGACTGCTGGGTGACTGGCTGGGGTACATCAAAGAGGATGAGGCACTGCCATC
TCCCCACACCCTCCAGGAAGTTCAGGTGCGCATCATAACAACCTATGTGCAACCACCTCTTCTCAAG
TACAGTTTCCGCAAGGACATCTTTGGAGACATGGTTTGTGCTGGCAATGCCAAGCGGGAAGGATGCTT
GCTTCGGTGACTCAGGTGACCCCTTGGCCTGTAAACAAGATGGACTGTGGTATCAGATTGGAGTCGTGAG
CTGGGGAGTGGGCTGTGGTCGGCCCAATCGGCCGGTGTCTACACCAATATCAGCCACCCTTTGAGTGG
ATCCAGAAGCTGATGGCCAGAGTGGCATGTCCAGCCAGACCCCTCTGGCCACTACTCTTTTTCCCTC
TTCTCTGGGCTCTCCACTCTGGGCGCGTC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

Protein Sequence: >RC214372 protein sequence
Red=Cloning site Green=Tags(s)

MGARGALLLALLLARAGLRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSRLWDSHVCVGS
 LLSHRWALTAAHCFETYSDLSDPSGWMVQFGLTSMPSFWSLQAYYTRYFVSNLYLSPRYLGNSPYDIAL
 VKLSAPVTYTKHIQPICLQASTFEFENRTDCWVTGWGYIKEDEALPSPHTLQEVQVAIINNSMCNHLFLK
 YSFRKIDIFGDMVCAGNAQGGKDACFGDSSGGLACNKNGLWYQIGVVSWGVCGRPNRPGVYTNISHHFEW
 IQKLMAQSGMSQPDPSWPLLLFFLLWALPLLGPV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6374_e12.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_144956

ORF Size: 942 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_144956.3](#)

RefSeq Size: 1162 bp

RefSeq ORF: 939 bp

Locus ID: 10942

UniProt ID: [Q9Y6M0](#)

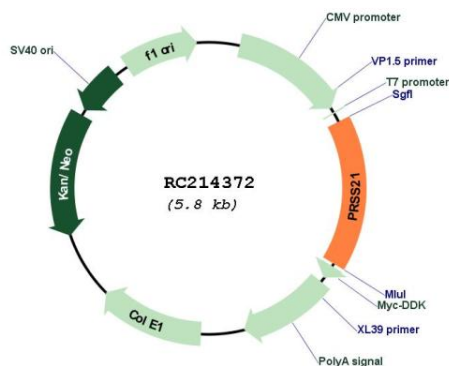
Cytogenetics: 16p13.3

Protein Families: Druggable Genome

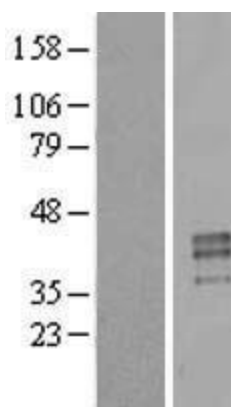
MW: 34.9 kDa

Gene Summary: This gene encodes a cell-surface anchored serine protease, which is a member of the trypsin family of serine proteases. The encoded protein is predicted to be active on peptide linkages involving the carboxyl group of lysine or arginine. The encoded protein localizes to the cytoplasm and the plasma membrane of premeiotic testicular germ cells and may be involved in progression of testicular tumors of germ cell origin. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. [provided by RefSeq, Jul 2012]

Product images:



Circular map for RC214372



Western blot validation of overexpression lysate (Cat# [LY408098]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC214372 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).