

## Product datasheet for RC210423

### PRSS21 (NM\_006799) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	PRSS21 (NM_006799) 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:	>RC210423 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

ATGGGCGCGCGGGGCGCTGCTGCTGGCGCTGCTGCTGGCTCGGGCTGGACTCAGGAAGCCGGAGTCGC  
AGGAGGCGGCGCCCTTATCAGGACCATGCGGCCGACGGGTATCACGTCGCGCATCGTGGGTGGAGAGGA  
CGCCGAATCGGGCGTTGGCCGTGGCAGGGGAGCCTGCGCCTGTGGGATCCCACGTATGCGGAGTGAGC  
CTGCTCAGCCACCCTGGGCACTCACGGCGGCGCACTGCTTTGAAACCTATAGTGACCTTAGTGATCCCT  
CCGGGTGGATGGTCCAGTTTGGCCAGCTGACTTCCATGCCATCCTTCTGGAGCCTGCAGGCTACTACAC  
CGTTACTTCGTATCGAATATCTATCTGAGCCCTCGCTACCTGGGGAATTCACCCATGACATTGCCTTG  
GTGAAGCTGTCTGCACCTGTACCTACACTAAACACATCCAGCCCATCTGTCTCCAGGCCTCCACATTTG  
AGTTTGAGAACCGGACAGACTGCTGGGTGACTGGCTGGGGTACATCAAAGAGGATGAGGCACTGCCATC  
TCCCCACACCTCCAGGAAGTTCAGGTGCGCATCATAACAACCTATGTGCAACCACCTCTTCTCAAG  
TACAGTTTCCGCAAGGACATCTTTGGAGACATGGTTTGTGCTGGCAATGCCAAGCGGGAAGGATGCTT  
GCTTCGGTGACTCAGGTGACCCTTGGCCTGTAAACAAGATGGACTGTGGTATCAGATTGGAGTCGTGAG  
CTGGGGAGTGGGCTGTGGTCGGCCCAATCGGCCGGTGTCTACACCAATATCAGCCACCCTTTGAGTGG  
ATCCAGAAGCTGATGGCCAGAGTGCCATGTCCAGCCAGACCCCTCTGGCCACTACTCTTTTTCCCTC  
TTCTCTGGGCTCTCCACTCTGGGCGCGTC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

**Protein Sequence:** >RC210423 protein sequence  
Red=Cloning site Green=Tags(s)

MGARGALLLALLLARAGLRKPESQEAAPLSGPCGRRVITSRIVGGEDAELGRWPWQGSRLWDSHVCVSL  
 LLSHRWALTAHCFETYSDLSDPSGWMVQFGLTSMPSFWSLQAYYTRYFVSNLYLSPRYLGNSPYDIAL  
 VKLSAPVTYTKHIQPICLQASTFEFENRTDCWVTGWGYIKEDEALPSPHTLQEVQVAIINNSMCNHLFLK  
 YSFRKIDIFGDMVCAGNAQGGKDACFGDSSGGLACNKNGLWYQIGVVSWGVCGRPNRPGVYTNISHHFEW  
 IQKLMAQSGMSQPDPSWPLLLFFLLWALPLLGPV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6007\\_f06.zip](https://cdn.origene.com/chromatograms/mk6007_f06.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\_006799

**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\\_006799.4](#)

**RefSeq Size:** 1168 bp

**RefSeq ORF:** 945 bp

**Locus ID:** 10942

**UniProt ID:** [Q9Y6M0](#)

**Cytogenetics:** 16p13.3

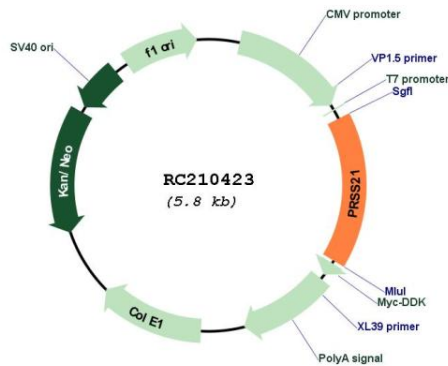
**Domains:** Tryp\_SPc

**Protein Families:** Druggable Genome

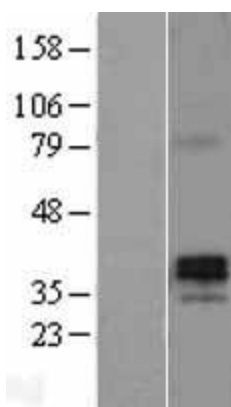
**MW:** 34.9 kDa

**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 RC210423



Western blot validation of overexpression lysate (Cat# [LY402032]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC210423 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).