

## Product datasheet for RC233936

### Factor VII (F7) (NM\_001267554) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Factor VII (F7) (NM_001267554) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Factor VII
Synonyms:	SPCA
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC233936 representing NM_001267554 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGTCTCCAGGCCCTCAGGCTCCTCTGCCTTCTGCTTGGGCTTCAGGGCTGCCTGGCTGCAGATGGGG  
ACCAGTGTGCCTCAAGTCCATGCCAGAATGGGGGCTCCTGCAAGGACCAGCTCCAGTCTATATCTGCTT  
CTGCCTCCCTGCCTTCGAGGGCCGGAACGTGAGACGCACAAGGATGACCAGCTGATCTGTGTGAACGAG  
AACGGCGGCTGTGAGCAGTACTGCAGTGACCACACGGGCACCAAGCGCTCCTGTCCGGTCCACGAGGGGT  
ACTCTCTGCTGGCAGACGGGGTGTCTGCACACCACAGTTGAATATCCATGTGGAAAAATACCTATTCT  
AGAAAAAGAAATGCCAGCAAACCCCAAGGCCAATTGTGGGGGCAAGGTGTGCCCCAAAGGGGAGTGT  
CCATGGCAGGTCTGTTGTTGGTGAATGGAGCTCAGTTGTGTGGGGGACCCTGATCAACACCATCTGGG  
TGGTCTCCCGGCCCACTGTTTCGACAAAAATCAAGAACTGGAGGAACCTGATCGCGGTGCTGGGCGAGCA  
CGACCTCAGCGAGCAGCAGCGGGATGAGCAGAGCCGGCGGGTGGCGCAGGTATCATCCCCAGCAGTAC  
GTCCCGGGCACCACCAACCACGACATCGCGTGTCTCCGCTGCACCAGCCCGTGGTCTCACTGACCATG  
TGGTGGCCCTCTGCCTGCCGAACGGACGTTCTCTGAGAGGACGCTGGCCTTCGTGCGCTTCTCATTGGT  
CAGCGGCTGGGGCCAGCTGCTGGACCGTGGCGCCACGGCCCTGGAGCTCATGGTCTCAAGTGGCCCGG  
CTGATGACCCAGGACTGCCTGCAGCAGTCACGGAAGGTGGGAGACTCCCCAAATATCACGGAGTACATGT  
TCTGTCCCGCTACTCGGATGGCAGCAAGGACTCCTGCAAGGGGACAGTGGAGGCCACATGCCACCCA  
CTACCGGGGCACGTGGTACCTGACGGGCATCGTACGCTGGGGCCAGGGCTGCGCAACCGTGGGCCACTTT  
GGGGTGTACACCAGGTCTCCAGTACATCGAGTGGCTGCAAAGCTCATGCGCTCAGAGCCACGCCAG  
GAGTCCTCCTGCGAGCCCCATTCCC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

**Protein Sequence:** >RC233936 representing NM\_001267554  
Red=Cloning site Green=Tags(s)

MVSQALRLLCLLLGLQGCLAADGDQCASSPCQNGGSKDQLQSYICFCLPAFEGRNCETHKDDQLICVNE  
 NGGCEQYCSDHGTGRSCRCHEGYSLLADGVSCPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGEC  
 PWQVLLL VNGAQLCGGTLINTI WVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTY  
 VPGTTNHDIALRLHQPVVLTDHVVPLCLPERTF SERTLAFVRFSLVSGWGQLDRGATALELMVLNVPR  
 LMTQDCLQQSRKVGDSPNITEYMF CAGYSDGSKDSCCKGDSGGPHATHYRGTWYLTGIVSWGQCATVGHF  
 GYVTRVSQYIEWLQKLMRSEPRPGVLLRAPFP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_001267554

**ORF Size:** 1146 bp

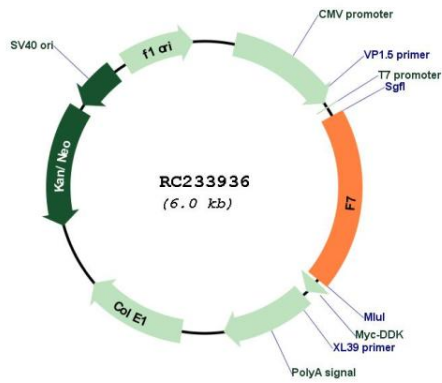
**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone 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).

<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<u>NM_001267554.1, NP_001254483.1</u>
<b>RefSeq Size:</b>	2892 bp
<b>RefSeq ORF:</b>	1149 bp
<b>Locus ID:</b>	2155
<b>Cytogenetics:</b>	13q34
<b>Protein Families:</b>	Druggable Genome, Protease
<b>Protein Pathways:</b>	Complement and coagulation cascades
<b>MW:</b>	42.3 kDa
<b>Gene Summary:</b>	<p>This gene encodes coagulation factor VII which is a vitamin K-dependent factor essential for hemostasis. This factor circulates in the blood in a zymogen form, and is converted to an active form by either factor IXa, factor Xa, factor XIIa, or thrombin by minor proteolysis. Upon activation of the factor VII, a heavy chain containing a catalytic domain and a light chain containing 2 EGF-like domains are generated, and two chains are held together by a disulfide bond. In the presence of factor III and calcium ions, the activated factor then further activates the coagulation cascade by converting factor IX to factor IXa and/or factor X to factor Xa. Defects in this gene can cause coagulopathy. Alternative splicing results in multiple transcript variants encoding different isoforms that may undergo similar proteolytic processing to generate mature polypeptides. [provided by RefSeq, Aug 2015]</p>

Product images:



Circular map for RC233936