

## Product datasheet for **RG219116**

### Factor VIII (F8) (NM\_019863) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Factor VIII (F8) (NM_019863) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Factor VIII
Synonyms:	AHF; DXS1253E; F8B; F8C; FVIII; HEMA
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG219116 representing NM_019863 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCGGATCCAAGACCCTGGGAAGGTCTTCTTTGGCAATGTGGATTCATCTGGGATAAAACACAATATTT  
TTAACCCTCCAATTATTGCTCGATACATCCGTTTGCACCAACTCATTATAGCATTTCGCAGCACTTTTCG  
CATGGAGTTGATGGGCTGTGATTTAAATAGTTGCAGCATGCCATTGGGAATGGAGAGTAAAGCAATATCA  
GATGCACAGATTACTGCTTCATCCTACTTTACCAATATGTTTGCCACCTGGTCTCCTTCAAAGCTCGAC  
TTCACCTCCAAGGAGGAGTAATGCCTGGAGACCTCAGGTGAATAATCCAAAAGAGTGGCTGCAAGTGGA  
CTTCCAGAAGACAATGAAAGTCACAGGAGTAACTACTCAGGGAGTAAAATCTCTGCTTACCAGCATGTAT  
GTGAAGGAGTTCTCATCTCCAGCAGTCAAGATGGCCATCAGTGGACTCTTTTTTTCAGAAATGGCAAAG  
TAAAGTTTTTTCAGGAAATCAAGACTCCTTACACCTGTGGTGAAGTCTCTAGACCCACCGTTACTGAC  
TCGCTACCTTCGAATTCACCCCAAGTTGGGTGCACCAGATTGCCCTGAGGATGGAGGTTCTGGGCTGC  
GAGGCACAGGACCTCTAC

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >RG219116 representing NM\_019863  
Red=Cloning site Green=Tags(s)

MRIQDPGKVFVFGNVDSSGIKHNIFNPPIIARYIRLHPHYSIRSTLRMELMGCDLNSCSMPLGMESKAIS  
 DAQITASSYFTNMFATWSPSKARLHLQGRSNAWRPQVNNPKEWLQVDFQKTMKVTGVTTQGVKSLTSMY  
 VKEFLISSSQDGHQWTLFFQNGKVKVFQGNQDSF TPVVNSLDPPLLTRYLRIHPQSWVHQIALRMEVLGC  
 EAQDLY

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_019863

**ORF Size:** 648 bp

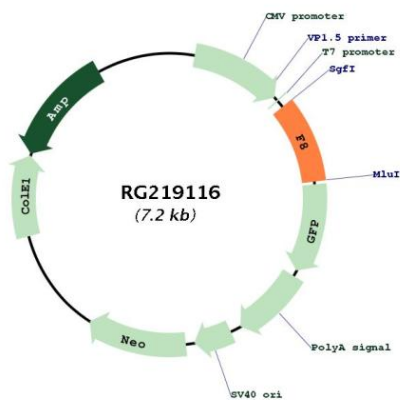
**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone 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>	<a href="#">NM_019863.2</a> , <a href="#">NP_063916.1</a>
<b>RefSeq Size:</b>	2617 bp
<b>RefSeq ORF:</b>	651 bp
<b>Locus ID:</b>	2157
<b>UniProt ID:</b>	<a href="#">P00451</a>
<b>Cytogenetics:</b>	Xq28
<b>Domains:</b>	F5_F8_type_C
<b>Protein Families:</b>	Druggable Genome, Secreted Protein
<b>Protein Pathways:</b>	Complement and coagulation cascades
<b>Gene Summary:</b>	<p>This gene encodes coagulation factor VIII, which participates in the intrinsic pathway of blood coagulation; factor VIII is a cofactor for factor IXa which, in the presence of Ca<sup>2+</sup> and phospholipids, converts factor X to the activated form Xa. This gene produces two alternatively spliced transcripts. Transcript variant 1 encodes a large glycoprotein, isoform a, which circulates in plasma and associates with von Willebrand factor in a noncovalent complex. This protein undergoes multiple cleavage events. Transcript variant 2 encodes a putative small protein, isoform b, which consists primarily of the phospholipid binding domain of factor VIIIc. This binding domain is essential for coagulant activity. Defects in this gene results in hemophilia A, a common recessive X-linked coagulation disorder. [provided by RefSeq, Jul 2008]</p>

Product images:



Circular map for RG219116