

Product datasheet for **RG219065**

Factor IX (F9) (NM_000133) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Factor IX (F9) (NM_000133) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Factor IX
Synonyms:	F9 p22; FIX; HEMB; P19; PTC; THPH8
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG219065 representing NM_000133
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGCAGCGCGTGAACATGATCATGGCAGAATCACCAGGCCTCATCACCATCTGCCTTTTAGGATATCTAC
 TCAGTGCATGAATGTACAGTTTTTCTTGATCATGAAAACGCCAACAAAATTCTGAATCGGCCAAAGAGGTA
 TAATTCAGGTAATTTGGAAGAGTTTGTCAAGGGAACCTTGAGAGAGAATGTATGGAAGAAAAGTGTAGT
 TTTGAAGAAGCAGCAGAGAAGTTTTGAAAACACTGAAAGAACAACCTGAATTTTGAAGCAGTATGTTGATG
 GAGATCAGTGTGAGTCCAATCCATGTTTAAATGGCGGCAGTTGCAAGGATGACATTAATTCCTATGAATG
 TTGGTGTCCCTTTGGATTTGAAGGAAAGAACTGTGAATTAGATGTAACATGTAACATTAAGAATGGCAGA
 TGCGAGCAGTTTTGTA AAAATAGTGTGATAACAAGGTGGTTTGTCTCTGTACTGAGGGATATCGACTTG
 CAGAAAACCAGAAGTCTGTGAACCAGCAGTGCCATTTCCATGTGGAAGAGTTTCTGTTTCAAAAACCTC
 TAAGCTCACCCGTGCTGAGACTGTTTTTCTGTGTTGACTATGTAATTTCTACTGAAGCTGAAACCATT
 TTGGATAACATCACTCAAAGCACCAATCATTTAATGACTTCACTCGGGTTGTTGGTGGAGAAGATGCCA
 AACCAGGTCAATCCCTTGGCAGGTTGTTTTGAATGGTAAAGTTGATGCATTCTGTGGAGGCTCTATCGT
 TAATGAAAAATGGATTGTAACCTGCTGCCACTGTGTTGAAACTGGTGTAAAAATTACAGTTGTGCGAGGT
 GAACATAATATTGAGGAGACAGAACATACAGAGCAAAAGCGAAATGTGATTCGAATTAATTCCTCACCACA
 ACTACAATGCAGCTATTAATAAGTACAACCATGACATTGCCCTTCTGGAAGTGGACGAAACCTTAGTGCT
 AAACAGCTACGTTACACCTATTTGCATTGCTGACAAGGAATACACGAACATCTTCTCAAATTTGGATCT
 GGCTATGTAAGTGGCTGGGAAGAGTCTCCACAAGGGAGATCAGCTTTAGTTCTTTCAGTACCTTAGAG
 TTCCACTTGTGACCGGACCCACATGTCTTCGATCTACAAAGTTCCACATCTATAACAACATGTTCTGTGC
 TGGCTTCCATGAAGGAGGTAGAGATTCATGTCAAGGAGATAGTGGGGGACCCCATGTTACTGAAAGTGAA
 GGGACCAGTTTCTTAACTGGAATTATTAGCTGGGGTGAAGAGTGTGCAATGAAAGCAAATATGGAATAT
 ATACCAAGGTATCCCGGTATGTCAACTGGATTAAGGAAAAACAAGCTCACT

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG219065 representing NM_000133
 Red=Cloning site Green=Tags(s)

MQRVNMIMAESPLITICLLGYLLSAECTVFLDHENANKILNRPKRYNSGKLEEFVQGNLERECMEKCS
 FEEAREVFENTERTTEFWKQYVDGDQCESNPCLNGGSKDDINSYECWCPFGFEGKNCELDVTNCIKNGR
 CEQFCKNSADNKVVCSTEGYRLAENQKSCEPAVPPFCGRVSVSQTSLKTRAETVFPDVDYVNSTEAETI
 LDNITQSTQSFNDFTRVVGGEDAKPGQFPWQVVLNGKVDACGGSIVNEKWIIVTAAHCVETGVKITVVAG
 EHNIEETEHEQKRNVIIRIPHHNYNAAINKYNHDIALLELDEPLVLSVYVTPICIAADKEYTNIIFLKFGS
 GYVSGWGRVPHKGRSALVLYLRVPLVDRATCLRSTKFTIYNNMFCAGFHEGGRDSCQGDSSGGPHVTEVE
 GTSFLTGIISWGEECAMKGYGIYTKVSRVYVNIKEKTKLT

TRTRPLE – GFP Tag – V

Restriction Sites:

SgfI-MluI

Cloning Scheme:


ACCN: NM_000133

ORF Size: 1383 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_000133.4](#)

RefSeq Size: 2804 bp

RefSeq ORF: 1386 bp

Locus ID: 2158

UniProt ID: [P00740](#)

Cytogenetics: Xq27.1

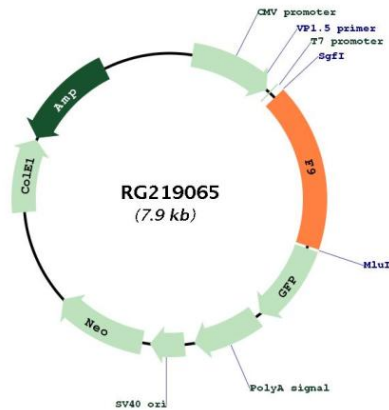
Domains: GLA, Tryp_SPc, EGF_CA, EGF, EGF

Protein Families: Druggable Genome, Protease, Secreted Protein

Protein Pathways: Complement and coagulation cascades

Gene Summary: This gene encodes vitamin K-dependent coagulation factor IX that circulates in the blood as an inactive zymogen. This factor is converted to an active form by factor XIa, which excises the activation peptide and thus generates a heavy chain and a light chain held together by one or more disulfide bonds. The role of this activated factor IX in the blood coagulation cascade is to activate factor X to its active form through interactions with Ca²⁺ ions, membrane phospholipids, and factor VIII. Alterations of this gene, including point mutations, insertions and deletions, cause factor IX deficiency, which is a recessive X-linked disorder, also called hemophilia B or Christmas disease. Alternative splicing results in multiple transcript variants encoding different isoforms that may undergo similar proteolytic processing. [provided by RefSeq, Sep 2015]

Product images:



Circular map for RG219065