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Product datasheet for RC202770

Fibrinogen gamma chain (FGG) (NM_000509) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Fibrinogen gamma chain (FGG) (NM_000509) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Fibrinogen gamma chain
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC202770 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAGTTGGTCCTTGCACCCCCGGAATTTAATTCTCTACTTCTATGCTCTTTTATTTCTCTCTTCAACAT
GTGTAGCATATGTTGCTACCAGAGACAACTGCTGCATCTTAGATGAAAGATTCGGTAGTTATTGTCCAAC
TACCTGTGGCATTGCAGATTTCCTGTCTACTTATCAAACCAAAGTAGACAAGGATCTACAGTCTTTGGAA
GACATCTTACATCAAGTTGAAAACAAAACATCAGAAGTCAAACAGCTGATAAAAGCAATCCAACTCACTT
ATAATCCTGATGAATCATCAAAACCAAATATGATAGACGCTGCTACTTTGAAGTCCAGGAAAATGTTAGA
AGAAATTATGAAATATGAAGCATCGATTTTAACACATGACTCAAGTATTCGATATTTGCAGGAAATATAT
AATTCAAATAATCAAAAGATTGTTAACCTGAAAGAGAAGGTAGCCCAGCTTGAAGCACAGTGCCAGGAAC
CTTGCAAAGACACGGTGCAAATCCATGATATCACTGGGAAAGATTGTCAAGACATTGCCAATAAGGGAGC
TAAACAGAGCGGGCTTTACTTTATTAAACCTCTGAAAGCTAACCAGCAATTCTTAGTCTACTGTGAAATC
GATGGGTCTGGAAATGGATGGACTGTGTTTCAGAAGAGACTTGATGGCAGTGTAGATTTCAAGAAAAACT
GGATTCAATATAAAGAAGGATTTGGACATCTGTCTCCTACTGGCACAACAGAATTTTGGCTGGGAAATGA
GAAGATTCATTTGATAAGCACACAGTCTGCCATCCCATATGCATTAAGAGTGGAACTGGAAGACTGGAAT
GGCAGAACCAGTACTGCAGACTATGCCATGTTCAAGGTGGGACCTGAAGCTGACAAGTACCGCCTAACAT
ATGCCTACTTCGCTGGTGGGGATGCTGGAGATGCCTTTGATGGCTTTGATTTTGGCGATGATCCTAGTGA
CAAGTTTTTCACATCCCATAATGGCATGCAGTTCAGTACCTGGGACAATGACAATGATAAGTTTGAAGGC
AACTGTGCTGAACAGGATGGATCTGGTTGGTGGATGAACAAGTGTCACGCTGGCCATCTCAATGGAGTTT
ATTACCAAGGTGGCACTTACTCAAAAGCATCTACTCCTAATGGTTATGATAATGGCATTATTTGGGCCAC
TTGGAAAACCCGGTGGTATTCCATGAAGAAAACCACTATGAAGATAATCCCATTCAACAGACTCACAATT
GGAGAAGGACAGCAACACCACCTGGGGGGAGCCAAACAGGCTGGAGACGTT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

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Protein Sequence:

>RC202770 protein sequence
Red=Cloning site Green=Tags(s)

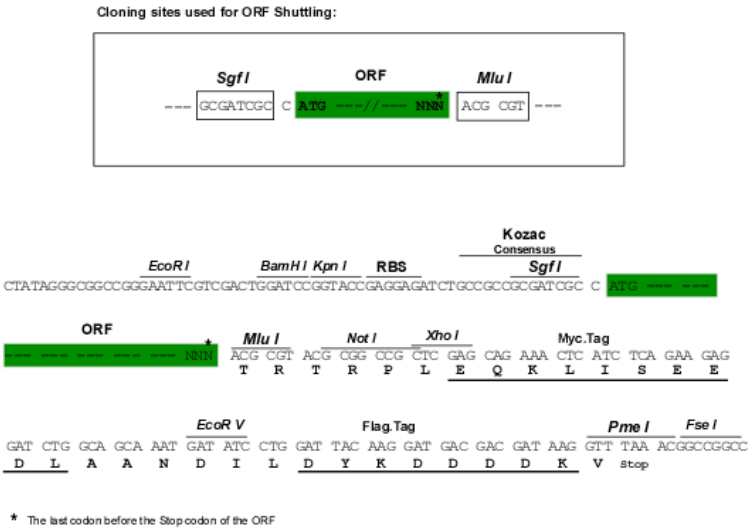
MSWSLHPRNLILYFYALLFLSSTCVAYVATRDNCCILDERFGSYCPTTCGIADFLSTYQTKVDKDLQSLE
DILHQVENKTSEVKQLIKAIQLTYNPDESSKPNMIDAATLKSRKMLEEIMKYEASILTHDSSIRYLQEIY
NSNNQKIVNLKEKVAQLEAQCQEPCKDTVQIHDITGKDCQDIANKGAKQSGLYFIKPLKANQQFLVYCEI
DGSGNGWTVFQKRLDGSVDFKKNWIQYKEGFGHLSPTGTTEFWLGNEKIHLISTQSAIPYALRVELEDWN
GRTSTADYAMFKVGPEADKYRLTYAYFAGGDAGDAFDGFDFGDDPSDKFFTSHNGMQFSTWDNDNDKFEG
NCAEQDGSGWWMNKCHAGHLNGVYYQGGTYSKASTPNGYDNGIIWATWKTRWYSMKKTTMKIIPFNRLTI
GEGQQHHLGGAKQAGDV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6152_f08.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_000509

ORF Size: 1311 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).

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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_000509.5
RefSeq Size:	1665 bp
RefSeq ORF:	1314 bp
Locus ID:	2266
UniProt ID:	P02679
Cytogenetics:	4q32.1
Domains:	FBG
Protein Families:	Druggable Genome, Secreted Protein, Transmembrane
Protein Pathways:	Complement and coagulation cascades
MW:	49.5 kDa
Gene Summary:	The protein encoded by this gene is the gamma component of fibrinogen, a blood-borne glycoprotein comprised of three pairs of nonidentical polypeptide chains. Following vascular injury, fibrinogen is cleaved by thrombin to form fibrin which is the most abundant component of blood clots. In addition, various cleavage products of fibrinogen and fibrin regulate cell adhesion and spreading, display vasoconstrictor and chemotactic activities, and are mitogens for several cell types. Mutations in this gene lead to several disorders, including dysfibrinogenemia, hypofibrinogenemia and thrombophilia. Alternative splicing results in transcript variants encoding different isoforms. [provided by RefSeq, Aug 2015]

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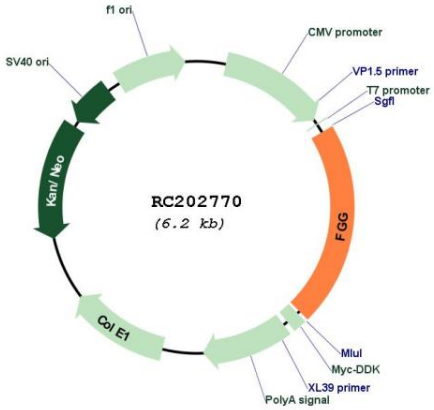
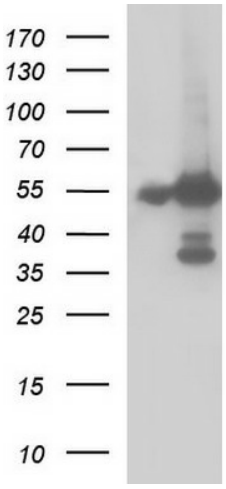
Product images:



Circular map for RC202770



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY FGG (Cat# RC202770, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-FGG(Cat# [TA507132]). Positive lysates [LY400173] (100ug) and [LC400173] (20ug) can be purchased separately from OriGene.

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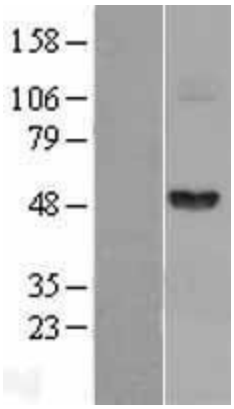
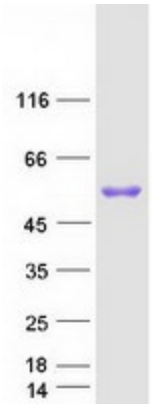


Western blot validation of overexpression lysate (Cat# [LY400173]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202770 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified FGG protein (Cat# [TP302770]). The protein was produced from HEK293T cells transfected with FGG cDNA clone (Cat# RC202770) using MegaTran 2.0 (Cat# [TT210002]).

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