

Product datasheet for **RG224278**

Fibrinogen alpha chain (FGA) (NM_000508) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Fibrinogen alpha chain (FGA) (NM_000508) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	FGA
Synonyms:	Fib2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG224278 representing NM_000508
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTTTTCCATGAGGATCGTCTGCCTGGTCTAAGTGTGGTGGGCACAGCATGGACTGCAGATAGTGGTG
 AAGGTGACTTTCTAGCTGAAGGAGGAGGCGTGCCTGGCCCAAGGTTGTGGAAAGACATCAATCTGCCTG
 CAAAGATTCAGACTGGCCCTTCTGCTCTGATGAAGACTGGAACACAAATGCCCTTCTGGCTGCAGGATG
 AAAGGGTTGATTGATGAAGTCAATCAAGATTTTACAAACAGAATAAATAAGCTCAAAAATCACTATTTG
 AATATCAGAAGAACAATAAGGATTTCTATTGTTGACCACTAATAAATGGAAATTTTGAGAGGCGATTT
 TTCCTCAGCCAATAACCGTGATAATACCTACAACCGAGTGTGAGAGGATCTGAGAAGCAGAATTGAAGTC
 CTGAAGCGCAAAGTCATAGAAAAAGTACAGCATATCCAGCTTCTGCAGAAAAATGTTAGAGCTCAGTTGG
 TTGATATGAAACGACTGGAGGTGGACATTGATATTAAGATCCGATCTTGTGAGGGTTCATGCAGTAGGGC
 TTTAGCTCGTGAAGTAGATCTGAAGGACTATGAAGATCAGCAGAAGCAACTTGAACAGGTCATTGCCAAA
 GACTTACTTCCCTCTAGAGATAGGCAACACTTACCACTGATAAAAATGAAACCAGTTCAGACTTGGTTC
 CCGGAAATTTTAAAGGCCAGCTTCAAGAGTACCCCAAGAGTGGAAAGGCATTAACAGACATGCCGAGAT
 GAGAATGGAGTTAGAGAGACCTGGTGAAATGAGATTACTCGAGGAGGCTCCACCTTTATGGAACCGGA
 TCAGAGACGGAAGCCCAAGAACCTAGCAGTGTGGAAGCTGGAACCTGGGAGCTCTGGACCTGGAA
 GTACTGGAACCGAAACCTGGGAGCTCTGGGACTGGAGGGACTGCAACCTGGAACCTGGGAGCTCTGG
 ACCTGGAAGTACTGGAAGCTGGAACCTGGGAGCTCTGGAACCTGGAAGTACTGGAACCAAAACCTGGG
 AGCCCTAGACCTGGTAGTACCGAACCTGGAATCCTGGCAGCTCTGAACGCGGAAGTGTGGGCAGATGGA
 CCTCTGAGAGCTCTGTATCTGGTAGTACTGGCAATGGCACTCTGAATCTGGAAGTTTTAGGCCAGATG
 CCCAGGCTCTGGGAACGCGAGGCTAACCAACCCAGACTGGGGCACATTTGAAGAGGTGTGAGGAAATGTA
 AGTCCAGGGACAAGGAGAGAGTACCACACAGAAAACTGGTCACTTCTAAAGGAGATAAAGAGCTCAGGA
 CTGGTAAAGAGAAGGTCACCTCTGGTAGCACAACCACCACGCTCGTTCTGCTCTAAAACCGTTACTAA
 GACTGTTATTGGTCTGATGGTCACAAAGAAGTTACCAAGAAGTGGTGACCTCCGAAGATGGTTCTGAC
 TGTCCCGAGGCAATGGATTTAGGCACATTGTCTGGCATAGGACTCTGGATGGTTCCGCCATAGGCACC
 CTGATGAAGCTGCCTTCTCGACACTGCCTCAACTGGAAAAACATTCCCAGGTTTCTTCACTATGTT
 AGGAGAGTTTGTGAGTACTGAGTCTAGGGGCTCAGAACTGGCATCTTCAAAATACAAGGAATCC
 AGTTCTCATCACCTGGGATAGTGAATCCCTTCCCGTGGTAAATCTTCAAGTTACAGCAAACAATTTA
 CTAGTAGCACGATTACAACAGAGGAGACTCCACATTTGAAAGCAAGAGCTATAAAATGGCAGATGAGGC
 CGGAAGTGAAGCCGATCATGAAGGAACACATAGCACCAAGAGAGGCCATGCTAAATCTCGCCCTGTGAGA
 GACTGTGATGATGCTCCAAACACATCCTTACAGTACCCAAAGTGGCATTTCATATCAAGTACCGG
 GATCCAGTAAGATTTTTCTGTTATTGGCATCAAGAGACCAGTTTGGGAGGATGGCTTTTGATCCAGCA
 AAGAATGGATGGATCACTGAATTTTAAACCGACCTGGCAAGACTACAAGAGAGGTTTCGGCAGCCTGAAT
 GACGAGGGGAAGGAGAATTCTGGCTAGGCAATGACTACCTCACTTACTAACCAAGGGGCTCTGTTCT
 TTAGGGTTGAATTAGAGGACTGGGCTGGGAATGAAGCTTATGCAGAATACACTCCGGGTAGGCTCTGA
 GGCTGAAGGCTATGCCCTCCAAGTCTCCTCCTATGAAGGCACTGCGGGTATGCTCTGATTGAGGGTTCC
 GTAGAGGAAGGGCAGAGTACACCTCTCACAACAACATGCAGTTTCAACCTTTGACAGGATGCGAGACC
 AGTGGGAAGAGAAGTGTGCAAGTCTATGGGGAGGCTGGTGGTATAATAACTGCCAAGCAGCCAACTCT
 CAATGGAATCTACTACCCTGGGGCTCCTATGACCAAGGAATAACAGTCTTATGAGATTGAGAATGGA
 GTGGTCTGGGTTCTTTAGAGGGGAGATTATCCCTCAGGGCTGTTCCGATGAAAATAGGCCCTTG
 TGACCAA

AGCGGACCGACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG224278 representing NM_000508
 Red=Cloning site Green=Tags(s)

MFSMRIVCLVLSVVGTAWTADSGEGDFLAEGGGVRGPRVVERHQSAACKDSWPFCSDEDWNYKCPSSGCRM
 KGLIDEVNQDFNTRINKLKNLSFEYQKNNKDSHSLTTNIMEILRGDFSSANNRNDNTYNRVSEDLRSRIEV
 LKRKVIKQVQHIQLLQKNVRAQLVDMKRLEVDIDIKIRSCRGSCSRALAREVDLKDYEDQKQLEQVIAK
 DLLPSRDRQHLLPLIKMKPVPDLVPGNFKSQLQKVPPEWKALTDMPQMRMELERPGGNEITRGGSTSYGTG
 SETESPRNPSSAGSWNSGSSGPGSTGNRNPSSGSGTGGTATWKPSSGPGSTGSWNSGSSGSGTGNQNP
 SPRPGSTGTWNPSSERGSAGHWTSESSVSGSTGQWHSESGSFRPDPSPGSGNARNPNPDWGTFFEEVSGNV
 SPGTRREYHTEKLVTSKGDKELRTGKEKVTSGSTTTTRRSCSKTVTKTVIGPDGHKEVTKEVVTSEDGSD
 CPEAMDGLTSGIGTLDGFRHRHPDEAAFFDTASTGKTFPGFFSPMLGEFVSETESRGSSEGIPTNTKES
 SSHHPGIAEFPSRGKSSSYKQFTSSTSYNRGDSFESKSYKMADEAGSEADHEGTHSTKRGHAKSRPVR
 DCDDVLQTHPSGTQSGIFNIKLPSSKIFSVYCDQETSLGGWLLIQQRMDGSLNFNRTWQDYKRGFGLN
 DEGEGEFWLNDYLHLLTQRGSVLRVELEDWAGNEAYAEYHFRVGEAEAGYALQVSSYEGTAGDALIEGS
 VEEGAEYTSNNMQFSTFDRDADQWEENCAEVYGGGWYNNCAANLNGIYYPGGSYDPRNNSPYEIEENG
 VVWVSFRGADYSLRAVRMKIRPLVTQ

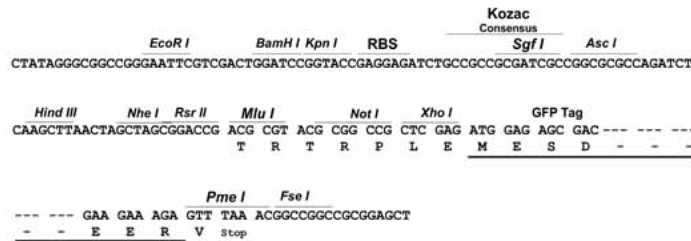
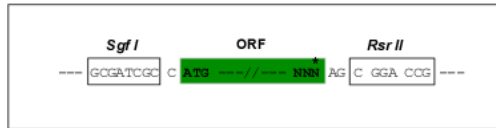
SGPTRRRLE - GFP Tag - V

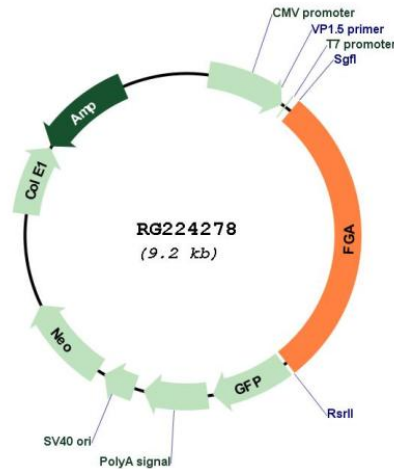
Restriction Sites:

SgfI-RsrII

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:


ACCN: NM_000508

ORF Size: 2598 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_000508.5](#)

RefSeq Size: 3655 bp

RefSeq ORF: 2601 bp

Locus ID: 2243

UniProt ID: [P02671](#)

Cytogenetics:	4q31.3
Domains:	FBG
Protein Families:	Druggable Genome, Secreted Protein
Protein Pathways:	Complement and coagulation cascades
Gene Summary:	<p>This gene encodes the alpha subunit of the coagulation factor fibrinogen, which is a component of the blood clot. Following vascular injury, the encoded preproprotein is proteolytically processed by thrombin during the conversion of fibrinogen to fibrin. Mutations in this gene lead to several disorders, including dysfibrinogenemia, hypofibrinogenemia, afibrinogenemia and renal amyloidosis. Alternative splicing results in multiple transcript variants, at least one of which encodes an isoform that undergoes proteolytic processing. [provided by RefSeq, Jan 2016]</p>