

Product datasheet for **RC214871**

Gelsolin (GSN) (NM_000177) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Gelsolin (GSN) (NM_000177) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GSN
Synonyms:	ADF; AGEL
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide
Sequence:**

>RC214871 representing NM_000177
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCTCCGACCGCCCCGCGCCCGCTGCTTTGCGCGTGTCCCTGGCGCTGTGCGCGTGTGCTGTC
 CCGTCCGCGCGGCCACTGCGTCGCGGGGGCGTCCCAGGCGGGGCGCCCCAGGGCGGGTGCCCGAGGC
 GCGGCCAACAGCATGGTGGTGAACACCCGAGTTCCTCAAGGCAGGGAAGGAGCCTGGCCTGCAGATC
 TGGCGTGTGGAGAAGTTCGATCTGGTGCCTGCCACCAACCTTTATGGAGACTTCTCACGGGCGACG
 CCTACGTCATCCTGAAGACAGTGCAGCTGAGGAACGAAATCTGCAGTATGACCTCCACTACTGGCTGGG
 CAATGAGTGCAGCCAGGATGAGAGCGGGGCGGCCCATCTTTACCGTGCAGCTGGATGACTACCTGAAC
 GGCCGGGCGTGCAGCACCGTGAAGTCCAGGGCTTCGAGTCGGCCACCTTCTAGGCTACTTCAAGTCTG
 GCCTGAAGTACAAGAAAGGAGGTGTGGCATCAGGATCAAGCACGTGGTACCCAACGAGGTGGTGGTGA
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 AACAAATGGCGACTGCTTCATCCTGGACCTGGGCAACAACATCCACCAGTGGTGTGGTTCCAAACAGCAATC
 GGTATGAAAGACTGAAGGCCACACAGGTGTCCAAGGGCATCCGGGACAACGAGCGGAGTGGCCGGGCCCCG
 AGTGCACGTGTCTGAGGAGGGCACTGAGCCCGAGGCGATGCTCCAGGTGCTGGGCCCAAGCCGGCTCTG
 CCTGCAGGTACCGAGGACACCGCAAGGAGGATGCGGCCAACCGCAAGCTGGCCAAGCTCTACAAGGTCT
 CCAATGGTGCAGGGACCATGTCCGTCTCCCTCGTGGTGTGAGAACCCCTTCGCCAGGGGGCCCTGAA
 GTCAGAGGACTGCTTCATCCTGGACCACGGCAAAGATGGGAAAATCTTTGTCTGGAAAGGCAAGCAGGCA
 AACACGGAGGAGGAAGGCTGCCCTCAAACAGCCTCTGACTTCATACCAAGATGGACTACCCCAAGC
 AGACTCAGGTCTCGTCTCTCTGAGGGCGGTGAGACCCCACTGTTCAAGCAGTCTTCAAGAACTTCAAG
 GGACCCAGACCAGACAGATGGCCTGGGCTTGCCTACCTTTCCAGCCATATCGCCAACGTGGAGCGGGTG
 CCCTTCGACGCCGCCACCTGCACACCTCCACTGCCATGGCCGCCAGCAGCGCATGGATGACGATGGCA
 CAGGCCAGAAACAGATCTGGAGAATCGAAGGTTCCAACAAGGTGCCCGTGGACCTGCCACATATGGACA
 GTTCTATGGAGGCGACAGCTACATCATTCTGTACAACCTACCGCCATGGTGGCCGCCAGGGGCGAGATAATC
 TATAACTGGCAGGGTGCCAGTCTACCCAGGATGAGGTCGCTGCATCTGCCATCCTGACTGCTCAGCTGG
 ATGAGGAGCTGGGAGGTACCCCTGTCCAGAGCCGTGGTCCAAGGCAAGGAGCCCGCCACCTCATGAG
 CCTGTTTGGTGGGAAGCCATGATCATCTACAAGGGCGGCACCTCCCGAGGGCGGGCAGACAGCCCT
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 CAGGTGGCAGAAGGCAGCGAGCCAGATGGCTTCTGGGAGGCCCTGGGCGGGAAGGCTGCCTACCGCACAT
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 ACGTTTTGTGATCGAAGAGGTTCTGGTGAAGTGCATGCAGGAAGACCTGGCAACGGATGACGTGATGCTT
 CTGGACACCTGGGACCAGGTCTTTGTCTGGGTTGAAAGGATTCTCAAGAAGAAGAAAAGACAGAAGCCT
 TGACTTCTGCTAAGCGGTACATCGAGACGGACCCAGCCAATCGGGATCGGCGGACGCCATCACCCGTGGT
 GAAGCAAGGCTTTGAGCCTCCCTCCTTTGTGGGCTGGTTCCTTGGCTGGGATGATGATTACTGGTCTGTG
 GACCCCTTGGACAGGGCCATGGCTGAGCTGGCTGCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC214871 representing NM_000177
Red=Cloning site Green=Tags(s)

MAPHRPAPALLCALSLALCALSLPVRAATASRGASQAGAPQGRVPEARPNSMVVEHPEFLKAGKEPGLQI
WRVEKFDLVPVPTNL YGDFFTGDAYVILKTVQLRNGNLQYDLHYWLGNECSQDESGAAAIFTVQLDDYLN
GRAVQHREVQGFESATFLGYFKSGLKYKKGGVASGFKHVVPNEVVVQRLFQVKGRRVVRATEVPSWESF
NNGDCFILD LGNNIHQWCGSNSNRYERLKATQVSKGIRDNERSGRARVHVSEEGTEPEAMLQVLGPKPAL
PAGTEDTAKEDAANRKLAKLYKVSNGAGTMSVSLVADENPFAQGALKSEDCFILDHGKDGKIFVWKGKQA
NTEERKAALKTASDFITKMDYPKQTQVSVLPEGGETPLFKQFFKNWRDPDQTDGLGLSYLSSHIANVERV
PFDAATLHTSTAMAAQHGMDDDDGTGQKQIWRIEGSNKVPVDPATYGFYGGDSYIILYNYRHGGRQGQII
YNWQGAQSTQDEVAASAILTAQLDEELGGTPVQSRVVQKKEPAHLSLFGGKPMI IYKGGTSREGGQTAP
ASTRLFQVRANSAGATRAVEVLPKAGALNSNDAFVLKTPSAAYLWVGTGASEAEKTGAQELLRVLRAQPV
QVAEGSEPDGFWEALGGKAAAYRTSPRLKDKKMDAHPRLFACSNKIGRFVIEEVPGELMQEDLATDDVML
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DPLDRAMAELAA

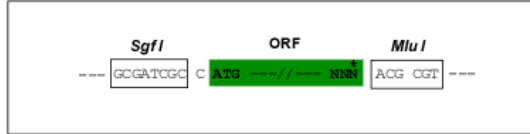
TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6219_d11.zip

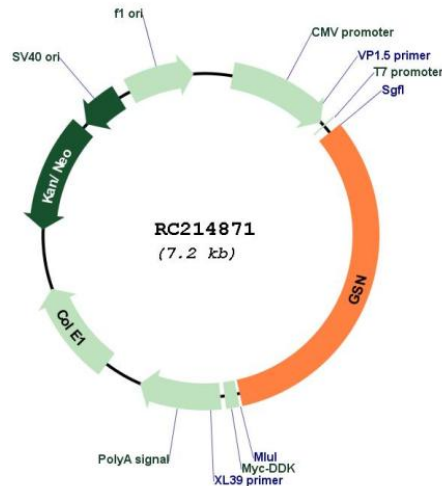
Restriction Sites: Sgfl-Mlul

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:


ACCN: NM_000177

ORF Size: 2346 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in *E. coli* are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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:

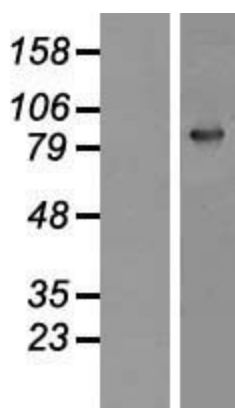
1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store 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_000177.5](#)

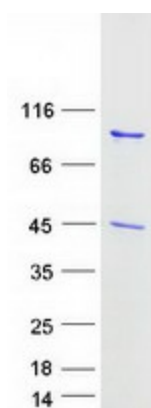
RefSeq Size:	2705 bp
RefSeq ORF:	2349 bp
Locus ID:	2934
UniProt ID:	P06396
Cytogenetics:	9q33.2
Domains:	GEL, Gelsolin
Protein Families:	Druggable Genome, Secreted Protein
Protein Pathways:	Fc gamma R-mediated phagocytosis, Regulation of actin cytoskeleton
MW:	85.7 kDa

Gene Summary: The protein encoded by this gene binds to the "plus" ends of actin monomers and filaments to prevent monomer exchange. The encoded calcium-regulated protein functions in both assembly and disassembly of actin filaments. Defects in this gene are a cause of familial amyloidosis Finnish type (FAF). Multiple transcript variants encoding several different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

Product images:



Western blot validation of overexpression lysate (Cat# [LY424875]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC214871 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified GSN protein (Cat# [TP314871]). The protein was produced from HEK293T cells transfected with GSN cDNA clone (Cat# RC214871) using MegaTran 2.0 (Cat# [TT210002]).