

Product datasheet for **RG204003**

GGCX (NM_000821) Human Tagged ORF Clone

Product data:

| | |
|---------------------------|---|
| Product Type: | Expression Plasmids |
| Product Name: | GGCX (NM_000821) Human Tagged ORF Clone |
| Tag: | TurboGFP |
| Symbol: | GGCX |
| Synonyms: | VKCFD1 |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-AC-GFP (PS100010) |
| E. coli Selection: | Ampicillin (100 ug/mL) |



[View online »](#)

ORF Nucleotide
Sequence:

>RG204003 representing NM_000821
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGCGGTGTCTGCCGGTCCGCGGGACCTCGCCAGCTCAGATAAAGTACAGAAAGACAAGGCTGAAC
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ACGCGTACGCGGGCCGCTCGAG – GFP Tag – GTTTAA

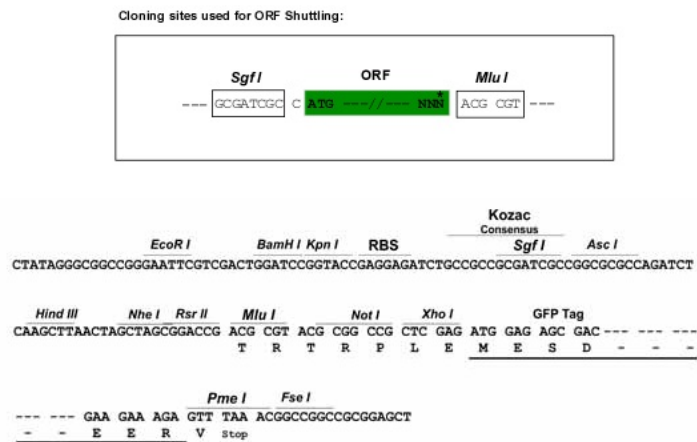
Protein Sequence: >RG204003 representing NM_000821
Red=Cloning site Green=Tags(s)

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MAVSAGSARTSPSSDKVQKDKAELISGPRQDSRIGKLLGFEWTDLSSWRRLVTLLNRPTDPASLAVFRFL
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LFLLPYWYVFLDKTSWNNHSYL YGLLAFQLTFMDANHYWSDVGLLNAHRRNAHVPLWNYAVLRGQIFIV
YFIAGVKKLDADWVEGYSM EYLSRHWFSPFKLLLSEELTSLLVVHWGGLLLDL SAGFLLFFDVRSRIGL
FFVSYFHCMSQLFSIGMFSYVMLASSPLFC SPEWPRKLVSYCPRRLQQLLPLKAAPQPSVSCVYKRSRG
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TGPLPPELQPLLEGEVKGGPEPTPLVQTFLLRRQRLQEIERRRNTPFHERFFRLLRKLKLYVFRSFLMTC
ISLRNLILGRPSLEQLAQEVTYANLRPF EAVGELNPSNTDSSHSNPPESNPDPVHSEF
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TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_000821

ORF Size: 2274 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_000821.7](#)

RefSeq Size: 3236 bp

RefSeq ORF: 2277 bp

Locus ID: 2677

UniProt ID: [P38435](#)

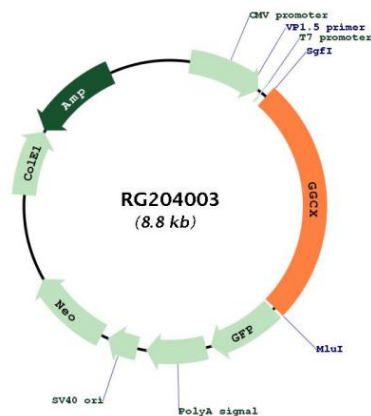
Cytogenetics: 2p11.2

Domains: VKG_Carbox

Protein Families: Druggable Genome, Transmembrane

Gene Summary: This gene encodes an integral membrane protein of the rough endoplasmic reticulum that carboxylates glutamate residues of vitamin K-dependent proteins to gamma carboxyl glutamate, a modification that is required for their activity. The vitamin K-dependent protein substrates have a propeptide that binds the enzyme, with carbon dioxide, dioxide, and reduced vitamin K acting as co-substrates. Vitamin K-dependent proteins affect a number of physiologic processes including blood coagulation, prevention of vascular calcification, and inflammation. Allelic variants of this gene have been associated with pseudoxanthoma elasticum-like disorder with associated multiple coagulation factor deficiency. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Aug 2015]

Product images:



Circular map for RG204003