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Product datasheet for RC226869

GGCX (NM_001142269) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GGCX (NM_001142269) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GGCX
Synonyms:	VKCFD1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC226869 representing NM_001142269
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCGGTGTCTGCCGGGTCCGCGCGGACCTCGCCCAGCTCAGGGTTCTTGATGGTGCTAGACATTCCCC
AGGAGCGGGGGCTCAGCTCTCTGGACCGGAAATACCTTGATGGGCTGGATGTGTGCCGCTTCCCCTTGCT
GGATGCCCTACGCCCACTGCCACTTGACTGGATGTATCTTGTCTACACCATCATGTTTCTGGGGGCACTG
GGCATGATGCTGGGCCTGTGCTACCGGATAAGCTGTGTGTTATTCCTGCTGCCATACTGGTATGTGTTTC
TCCTGGACAAGACATCATGGAACAACCACTCCTATCTGTATGGGTTGTTGGCCTTTCAGCTAACATTCAT
GGATGCAAACCACTACTGGTCTGTGGACGGTCTGCTGAATGCCCATAGGAGGAATGCCCACGTGCCCCTT
TGGAACTATGCAGTGCTCCGTGGCCAGATCTTCATTGTGTACTTCATTGCGGGTGTGAAAAAGCTGGATG
CAGACTGGGTTGAAGGCTATTCCATGGAATATTTGTCCCGGCACTGGCTCTTCAGTCCCTTCAAACTGCT
GTTGTCTGAGGAGCTGACTAGCCTGCTGGTCGTGCACTGGGGTGGGCTGCTGCTTGACCTCTCAGCTGGT
TTCCTGCTCTTTTTTGATGTCTCAAGATCCATTGGCCTGTTCTTTGTGTCCTACTTCCACTGCATGAATT
CCCAGCTTTTCAGCATTGGTATGTTCTCCTACGTCATGCTGGCCAGCAGCCCTCTCTTCTGCTCCCCTGA
GTGGCCTCGGAAGCTGGTGTCCTACTGCCCCCGAAGGTTGCAACAACTGTTGCCCCTCAAGGCAGCCCCT
CAGCCCAGTGTTTCCTGTGTGTATAAGAGGAGCCGGGGCAAAAGTGGCCAGAAGCCAGGGCTGCGCCATC
AGCTGGGAGCTGCCTTCACCCTGCTCTACCTCCTGGAGCAGCTATTCCTGCCCTATTCTCATTTTCTCAC
CCAGGGCTATAACAACTGGACAAATGGGCTGTATGGCTATTCCTGGGACATGATGGTGCACTCCCGCTCC
CACCAGCACGTGAAGATCACCTACCGTGATGGCCGCACTGGCGAACTGGGCTACCTTAACCCTGGGGTAT
TTACACAGAGTCGGCGATGGAAGGATCATGCAGACATGCTGAAGCAATATGCCACTTGCCTGAGCCGCCT
GCTTCCCAAGTATAATGTCACTGAGCCCCAGATCTACTTTGATATTTGGGTCTCCATCAATGACCGCTTC
CAGCAGAGGATTTTTGACCCTCGTGTGGACATCGTGCAGGCCGCTTGGTCACCCTTTCAGCGCACATCCT
GGGTGCAACCACTCTTGATGGACCTGTCTCCCTGGAGGGCCAAGTTACAGGAAATCAAGAGCAGCCTAGA
CAACCACACTGAGGTGGTCTTCATTGCAGATTTCCCTGGACTGCACTTGGAGAATTTTGTGAGTGAAGAC
CTGGGCAACACTAGCATCCAGCTGCTGCAGGGGGAAGTGACTGTGGAGCTTGTGGCAGAACAGAAGAACC
AGACTCTTCGAGAGGGAGAAAAAATGCAGTTGCCTGCTGGTGAGTACCATAAGGTGTATACGACATCACC
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CTGCAAGAATTAAAGGAAAAGGTGGAGAATGGAAGTGAAACAGGGCCTCTACCCCCAGAGCTGCAGCCTC
TGTTGGAAGGGGAAGTAAAAGGGGGCCCTGAGCCAACACCTCTGGTTCAGACCTTTCTTAGACGCCAACA
AAGGCTCCAGGAGATTGAACGCCGGCGAAATACTCCTTTCCATGAGCGATTCTTCCGCTTCTTGTTGCGA
AAGCTCTATGTCTTTCGCCGCAGCTTCCTGATGACTTGTATCTCACTTCGAAATCTGATATTAGGCCGTC
CTTCCCTGGAGCAGCTGGCCCAGGAGGTGACTTATGCAAACTTGAGACCCTTTGAGGCAGTTGGAGAACT
GAATCCCTCAAACACGGATTCTTCACATTCTAATCCTCCTGAGTCAAATCCTGATCCTGTCCACTCAGAG
TTC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

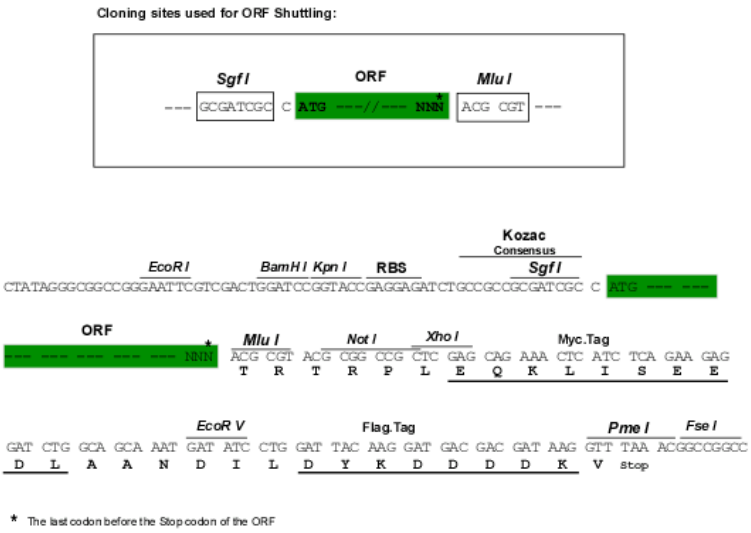
>RC226869 representing NM_001142269
Red=Cloning site Green=Tags(s)

MAVSAGSARTSPSSGFLMVLDIPQERGLSSLDRKYLDGLDVCRFPLLDALRPLPLDWMYLVYTIMFLGAL
GMMLGLCYRISCVLFLLPYWYVFLLDKTSWNNHSYLYGLLAFQLTFMDANHYWSVDGLLNAHRRNAHVPL
WNYAVLRGQIFIVYFIAGVKKLDADWVEGYSMEYLSRHWLFSPFKLLLSEELTSLLVVHWGGLLLDLSAG
FLLFFDVSRSIGLFFVSYFHCMNSQLFSIGMFSYVMLASSPLFCSPEWPRKLVSYCPRRLQQLLPLKAAP
QPSVSCVYKRSRGKSGQKPGLRHQLGAAFTLLYLLEQLFLPYSHFLTQGYNNWTNGLYGYSWDMMVHSRS
HQHVKITYRDGRTGELGYLNPGVFTQSRRWKDHADMLKQYATCLSRLLPKYNVTEPQIYFDIWVSINDRF
QQRIFDPRVDIVQAAWSPFQRTSWVQPLLMDLSPWRAKLQEIKSSLDNHTEVVFIADFPGLHLENFVSED
LGNTSIQLLQGEVTVELVAEQKNQTLREGEKMQLPAGEYHKVYTTSPSPSCYMYVYVNTTELALEQDLAY
LQELKEKVENGSETGPLPPELQPLLEGEVKGGPEPTPLVQTFLRRQQRLQEIERRRNTPFHERFFRFLLR
KLYVFRRSFLMTCISLRNLILGRPSLEQLAQEVTYANLRPFEAVGELNPSNTDSSHSNPPESNPDPVHSE
F

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001142269

ORF Size: 2103 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_001142269.4

RefSeq Size: 7304 bp

RefSeq ORF: 2106 bp

Locus ID: 2677

UniProt ID: P38435

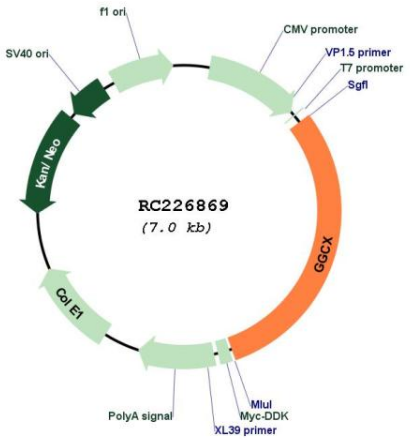
Cytogenetics: 2p11.2

Protein Families: Druggable Genome, Transmembrane

MW: 81 kDa

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 RC226869