

Product datasheet for **RC208249**

Glutaredoxin 5 (GLRX5) (NM_016417) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Glutaredoxin 5 (GLRX5) (NM_016417) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Glutaredoxin 5
Synonyms:	C14orf87; FLB4739; GRX5; PR01238; PRO1238; PRSA; SIDBA3; SPAHGC
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC208249 representing NM_016417 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGAGCGGGTCCCTCGGCCGAGCTGCGGCGGCTCTGCTCCGCTGGGGGCGCGGCGGGCGGGTGGCC
 TTTGGGGTCCGGGCGTGC GGCGCGGGCTCGGGCGGGCGGGCGGGCTCGGGGAGCAGTTGGACGC
 GCTGGTGAAGAAGGACAAGGTGGTGGTCTTCTCAAGGGGACGCCGAGCAGCCCCAGTGGGCTTCAGC
 AACGCCGTGGTGCAGATCTGCGGCTGCACGGCGTCCGCGATTACGCGGCTACAACGTGCTGGACGACC
 CGGAGCTCCGACAAGGCATTAAAGACTATTCCAAGTGGCCACCATCCCGCAAGTGTACCTCAATGGCGA
 GTTTGTAGGGGGCTGTGACATTCTCTGCAGATGCACCAGAATGGGGACTTGGTGAAGAAGTAAAAAG
 CTGGGGATCCACTCCGCCCTTTAGATGAAAAGAAAGACCAAGACTCCAAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:	>RC208249 representing NM_016417 Red=Cloning site Green=Tags(s)
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MSGSLGRAAAALLRWGRGAGGGGLWPGVRAAGSGAGGGGSAEQLDALVKKDKVVVFLKGTPEQPQCGFS
 NAVVQILRLHGVRDYAAYNVLDPELRQGIKDYSNWPTIPQVYLNGEFVGGCDILLQMHQNGDLVEELKK
 LGIHSALLDEKKDQDSK

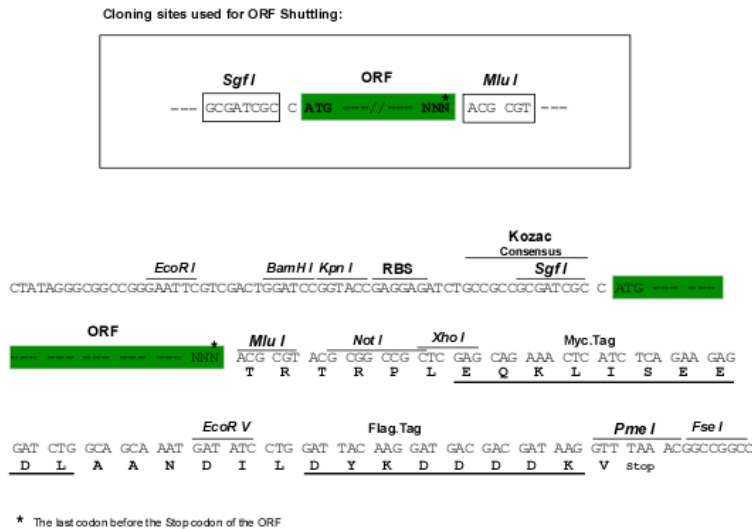
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:	https://cdn.origene.com/chromatograms/ja2291_e06.zip
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Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_016417

ORF Size: 471 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_016417.3](#)

RefSeq Size: 1182 bp

RefSeq ORF: 474 bp

Locus ID: 51218

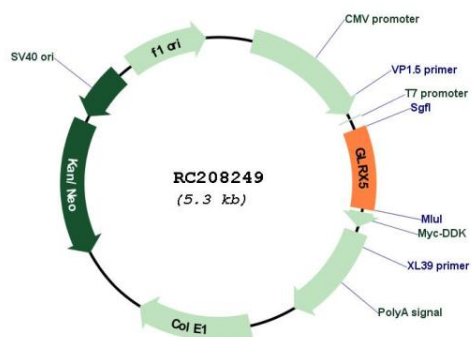
UniProt ID: [Q86SX6](#)

Cytogenetics: 14q32.13

MW: 17.1 kDa

Gene Summary: This gene encodes a mitochondrial protein, which is evolutionarily conserved. It is involved in the biogenesis of iron-sulfur clusters, which are required for normal iron homeostasis. Mutations in this gene are associated with autosomal recessive pyridoxine-refractory sideroblastic anemia. [provided by RefSeq, May 2010]

Product images:



Circular map for RC208249