

## **Product datasheet for SC330120**

## OriGene Technologies, Inc.

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## Glutaredoxin 2 (GLRX2) (NM\_001243399) Human Untagged Clone

## **Product data:**

**Product Type:** Expression Plasmids

**Product Name:** Glutaredoxin 2 (GLRX2) (NM\_001243399) Human Untagged Clone

Tag: Tag Free
Symbol: GLRX2

Synonyms: CGI-133; GRX2

**Vector:** pCMV6-Entry (PS100001)

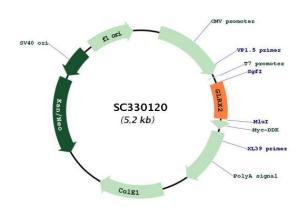
Fully Sequenced ORF: >SC330120 representing NM\_001243399.

Blue=Insert sequence Red=Cloning site Green=Tag(s)

AAAAAAGTAAGAGGAAAGAATTTCAGTGA

**Restriction Sites:** Sgfl-Mlul

Plasmid Map:



**ACCN:** NM 001243399



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**Insert Size:** 375 bp

**OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a

point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).

**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:** <u>NM 001243399.1</u>

 RefSeq Size:
 976 bp

 RefSeq ORF:
 375 bp

 Locus ID:
 51022

 UniProt ID:
 Q9NS18

 Cytogenetics:
 1q31.2

**Protein Families:** Transcription Factors

**MW:** 14.1 kDa

**Gene Summary:** The protein encoded by this gene is a member of the glutaredoxin family of proteins, which

maintain cellular thiol homeostasis. These proteins are thiol-disulfide oxidoreductases that use a glutathione-binding site and one or two active cysteines in their active site. This gene undergoes alternative splicing to produce multiple isoforms, one of which is ubiquitously

expressed and localizes to mitochondria, where it functions in mitochondrial redox

homeostasis and is important for the protection against and recovery from oxidative stress. Other isoforms, which have more restrictive expression patterns, show cytosolic and nuclear localization, and are thought to function in cellular differentiation and transformation,

possibly with a role in tumor progression. [provided by RefSeq, Aug 2011]

Transcript Variant: This variant (3) differs in the 5' UTR, lacks a portion of the 5' coding region, and uses a downstream in-frame start codon, compared to variant 1. The encoded isoform (3,

also known as Grx2c) is shorter at the N-terminus, compared to isoform 1.