

# **Product datasheet for SC304378**

### OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

## Glutaredoxin 2 (GLRX2) (NM\_016066) Human Untagged Clone

#### **Product data:**

**Product Type:** Expression Plasmids

**Product Name:** Glutaredoxin 2 (GLRX2) (NM\_016066) Human Untagged Clone

Tag: Tag Free Symbol: GLRX2

**Synonyms:** CGI-133; GRX2

Mammalian Cell Ne

Selection:

Neomycin

**Vector:** pCMV6-Entry (PS100001) **E. coli Selection:** Kanamycin (25 ug/mL)

Fully Sequenced ORF: >SC304378 representing NM\_016066.

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

GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

**ACGCGTACGCGGCCGCTC**GAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT

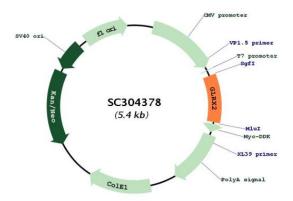
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC

Restriction Sites: Sgfl-Mlul





#### Plasmid Map:



**ACCN:** NM\_016066

**Insert Size:** 498 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).

**OTI Annotation:** This TrueClone is provided through our Custom Cloning Process that includes sub-cloning

into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

**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 016066.4</u>

 RefSeq Size:
 1134 bp

 RefSeq ORF:
 498 bp

 Locus ID:
 51022

 UniProt ID:
 Q9NS18

 Cytogenetics:
 1q31.2

**Protein Families:** Transcription Factors

**MW:** 18.7 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 (1) represents the longest transcript and encodes the longest

isoform (1, also known as Grx2b).