

## **Product datasheet for RG231649**

### 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 1 (GLRX) (NM 001243658) Human Tagged ORF Clone

#### **Product data:**

**Product Type:** Expression Plasmids

Product Name: Glutaredoxin 1 (GLRX) (NM\_001243658) Human Tagged ORF Clone

Tag: TurboGFP

Symbol: Glutaredoxin 1

Synonyms: GRX; GRX1

Mammalian Cell Neomycin

Selection:

**Vector:** pCMV6-AC-GFP (PS100010)

E. coli Selection: Ampicillin (100 ug/mL)

ORF Nucleotide >RG231649 representing NM\_001243658
Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGGCTCAAGAGTTTGTGAACTGCAAAATCCAGCCTGGGAAGGTGGTTGTGTTCATCAAGCCCACCTGCC CGTACTGCAGGAGGGCCCAAGAGATCCTCAGTCAATTGCCCATCAAACAAGGGCTTCTGGAATTTGTCGA TATCACAGCCACCAACCACCTAACGAGATTCAAGATTATTTGCAACAGCTCACGGGAGCAAGAACGGTG CCTCGAGTCTTTATTGGTAAAGATTGTATAGGCGGATGCAGTGATCTAGTCTCTTTTGCAACAGAGTGGGG

AACTGCTGACGCGGCTAAAGCAGATTGGAGCTCTGCAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG231649 representing NM\_001243658

Red=Cloning site Green=Tags(s)

MAQEFVNCKIQPGKVVVFIKPTCPYCRRAQEILSQLPIKQGLLEFVDITATNHTNEIQDYLQQLTGARTV

PRVFIGKDCIGGCSDLVSLQQSGELLTRLKQIGALQ

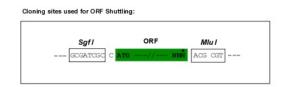
TRTRPLE - GFP Tag - V

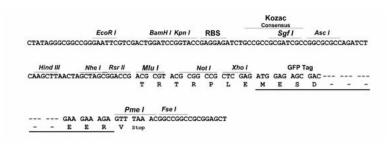
**Restriction Sites:** Sgfl-Mlul





#### **Cloning Scheme:**





**ACCN:** NM\_001243658

ORF Size: 318 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:** <u>NM 001243658.2</u>

**RefSeq Size:** 1497 bp **RefSeq ORF:** 321 bp



 Locus ID:
 2745

 UniProt ID:
 P35754

 Cytogenetics:
 5q15

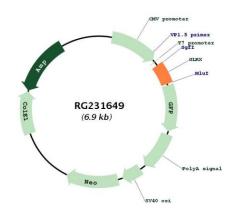
**Protein Families:** Druggable Genome

**Gene Summary:** This gene encodes a member of the glutaredoxin family. The encoded protein is a

cytoplasmic enzyme catalyzing the reversible reduction of glutathione-protein mixed disulfides. This enzyme highly contributes to the antioxidant defense system. It is crucial for several signalling pathways by controlling the S-glutathionylation status of signalling mediators. It is involved in beta-amyloid toxicity and Alzheimer's disease. Multiple alternatively spliced transcript variants encoding the same protein have been identified.

[provided by RefSeq, Aug 2011]

# **Product images:**



Circular map for RG231649