

# Product datasheet for SC318761

### OriGene Technologies, Inc.

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# Glutaredoxin 1 (GLRX) (NM\_001118890) Human Untagged Clone

#### **Product data:**

**Product Type:** Expression Plasmids

Product Name: Glutaredoxin 1 (GLRX) (NM 001118890) Human Untagged Clone

Tag: Tag Free

Symbol: Glutaredoxin 1

Synonyms: GRX; GRX1

Mammalian Cell Neomycin

Selection:

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

Fully Sequenced ORF: >SC318761 representing NM\_001118890.

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

GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

ATGGCTCAAGAGTTTGTGAACTGCAAAATCCAGCCTGGGAAGGTGGTTGTGTTCATCAAGCCCACCTGC CCGTACTGCAGGAGGGCCCAAGAGATCCTCAGTCAATTGCCCATCAAACAAGGGCTTCTGGAATTTGTC GATATCACAGCCACCAACCACCACACTAACGAGATTCAAGATTATTTGCAACAGCTCACGGGAGCAAGAACG GTGCCTCGAGTCTTTATTGGTAAAGATTGTATAGGCGGATGCAGTGATCTAGTCTCTTTGCAACAGAGT

GGGGAACTGCTGACGCGGCTAAAGCAGATTGGAGCTCTGCAG<mark>TAA</mark>

**ACGCGTACGCGGCCGCTC**GAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT

TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC

**Restriction Sites:** Sgfl-Mlul

ACCN: NM\_001118890

**Insert Size:** 321 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.

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**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 001118890.1</u>

RefSeq Size: 1093 bp
RefSeq ORF: 321 bp
Locus ID: 2745
UniProt ID: P35754
Cytogenetics: 5q15

**Protein Families:** Druggable Genome

**MW:** 11.8 kDa

**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]

Transcript Variant: This variant (2) differs in the 3' UTR, compared to variant 1. Variants 1-4

encode the same protein.