

## **Product datasheet for MR216034L4**

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OriGene Technologies, Inc.

## Glrx2 (NM\_001038592) Mouse Tagged Lenti ORF Clone

## **Product data:**

**Product Type:** Expression Plasmids

**Product Name:** Glrx2 (NM\_001038592) Mouse Tagged Lenti ORF Clone

Tag: mGFP Symbol: Glrx2

**Synonyms:** 1700010P22Rik; AI645710; Grx2

Mammalian Cell Puromycin

Selection:

**Vector:** pLenti-C-mGFP-P2A-Puro (PS100093)

E. coli Selection: Chloramphenicol (34 ug/mL)

ORF Nucleotide The ORF insert of this clone is exactly the same as(MR216034).

Sgfl-Mlul

Sequence:

Cloning Scheme:

**Restriction Sites:** 

Cloning sites used for ORF Shuttling:





<sup>\*</sup> The last codon before the Stop codon of the ORF

**ACCN:** NM\_001038592

ORF Size: 468 bp

## Glrx2 (NM\_001038592) Mouse Tagged Lenti ORF Clone - MR216034L4

**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 001038592.1</u>, <u>NP 001033681.1</u>

 RefSeq Size:
 3603 bp

 RefSeq ORF:
 471 bp

 Locus ID:
 69367

 UniProt ID:
 Q923X4

**Cytogenetics:** 1 62.53 cM

**Gene Summary:** 

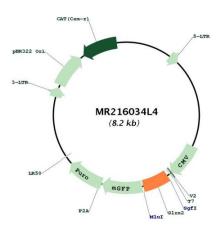
Glutathione-dependent oxidoreductase that facilitates the maintenance of mitochondrial redox homeostasis upon induction of apoptosis by oxidative stress. Involved in response to hydrogen peroxide and regulation of apoptosis caused by oxidative stress. Acts as a very efficient catalyst of monothiol reactions because of its high affinity for protein glutathione-mixed disulfides. Can receive electrons not only from glutathione (GSH), but also from thioredoxin reductase supporting both monothiol and dithiol reactions. Efficiently catalyzes both glutathionylation and deglutathionylation of mitochondrial complex I, which in turn regulates the superoxide production by the complex. Overexpression decreases the

susceptibility to apoptosis and prevents loss of cardiolipin and cytochrome c release.

[UniProtKB/Swiss-Prot Function]



# **Product images:**



Circular map for MR216034L4