

## Product datasheet for **MR227967**

### **Glrx2 (NM\_001038593) Mouse Tagged ORF Clone**

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Glrx2 (NM\_001038593) Mouse Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** Glrx2  
**Synonyms:** 1700010P22Rik; AI645710; Grx2  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >MR227967 representing NM\_001038593  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGGAAACAGCACATCGTCGTTTTGGGGGAAGTCTACAACACTCCTGTGAACCAGATCCAAGAAACAA  
TTTCTAACAAATTGTGGTGATCTTCTCAAAAACATCCTGCTCTTACTGTTCCATGGCCAAGAAGATTTT  
CCATGACATGAATGTCAACTACAAGGCTGTGGAGTTGGATATGCTGGAATATGGCAACAGTTTCAAGAT  
GCGCTTACAAGATGACTGGGAAAGAACCCTCCAGGATATTTGTCAATGGACGATTTATTGGAGGCC  
CAGCGGACTCACAGGCTTACAAAGAAGGAAATTGCTGCCTCTGGTTCATCAGTGTTATTTAAAAAA  
AAAACAAGAGGAAAGACAT

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >MR227967 representing NM\_001038593  
 Red=Cloning site Green=Tags(s)

MGNSTSSFVGKSTTTPVNQIQETISNNCVVIFSKTSCSYCSMAKKIFHDMNVNYKAVELDMLEYGNQFQD  
ALHKMTGERTVPRIFVNGRFIGGAADTHRLHKEGKLLPLVHQCYLKKKQEERH

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** Sgfl-MluI



[View online »](#)



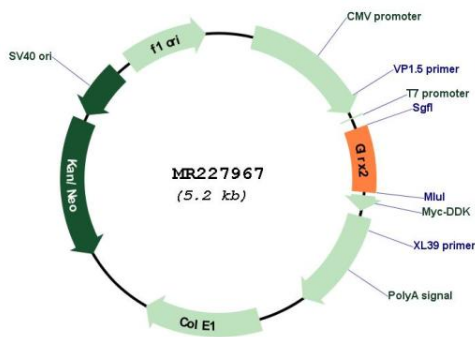
UniProt ID: [Q923X4](#)

Cytogenetics: 1 62.53 cM

MW: 14 kDa

**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 MR227967