

### **Anti-Glutaredoxin 2 Antibody**

**Catalog # ABO11192** 

### **Specification**

## **Anti-Glutaredoxin 2 Antibody - Product Information**

Application WB, IHC-P
Primary Accession Q9NS18
Host Rabbit

Reactivity Human, Mouse, Rat

Clonality Polyclonal Lyophilized

**Description** 

Rabbit IgG polyclonal antibody for Glutaredoxin-2, mitochondrial(GLRX2) detection. Tested with WB, IHC-P in Human; Mouse; Rat.

### Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

### **Anti-Glutaredoxin 2 Antibody - Additional Information**

**Gene ID 51022** 

**Other Names** 

Glutaredoxin-2, mitochondrial, GLRX2, GRX2

Calculated MW 18052 MW KDa

### **Application Details**

Immunohistochemistry(Paraffin-embedded Section), 0.5-1  $\mu$ g/ml, Human, Rat, Mouse, By Heat<br/>br>Western blot, 0.1-0.5  $\mu$ g/ml, Human, Rat, Mouse<br/>cbr>

## **Subcellular Localization**

Isoform 1: Mitochondrion.

## **Tissue Specificity**

Widely expressed. Expressed in brain, heart, skeletal muscle, colon, thymus, spleen, kidney, liver, small intestine, placenta and lung. Not expressed in peripheral blood leukocytes. .

#### **Protein Name**

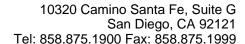
Glutaredoxin-2, mitochondrial

## Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

### **Immunogen**

A synthetic peptide corresponding to a sequence in the middle region of human Glutaredoxin 2(103-119aa EYGNQFQDALYKMTGER), different from the related rat sequence by two amino acids, and from the related mouse sequence by one amino acid.





**Purification** 

Immunogen affinity purified.

**Cross Reactivity** 

No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

**Sequence Similarities** 

Belongs to the glutaredoxin family.

## **Anti-Glutaredoxin 2 Antibody - Protein Information**

Name GLRX2

**Synonyms** GRX2

#### **Function**

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.

### **Cellular Location**

[Isoform 1]: Mitochondrion.

### **Tissue Location**

Widely expressed. Expressed in brain, heart, skeletal muscle, colon, thymus, spleen, kidney, liver, small intestine, placenta and lung. Not expressed in peripheral blood leukocytes

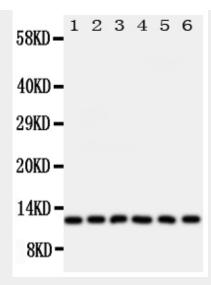
## **Anti-Glutaredoxin 2 Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

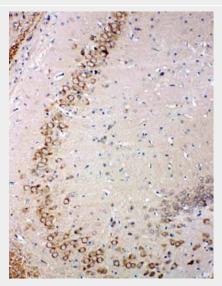
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# Anti-Glutaredoxin 2 Antibody - Images





Anti-Glutaredoxin 2 antibody, ABO11192, Western blottingLane 1: Rat Testis Tissue LysateLane 2: HELA Cell LysateLane 3: U87 Cell LysateLane 4: NEU Cell LysateLane 5: JURKAT Cell LysateLane 6: MCF-7 Cell Lysate



Anti-Glutaredoxin 2 antibody, ABO11192, IHC(P)IHC(P): Rat Brain Tissue

## Anti-Glutaredoxin 2 Antibody - Background

GLRX2(Glutaredoxin-2) also known as Glutaredoxin-2, mitochondrial or GRX2, is a protein that in humans is encoded by the GLRX2 gene. Glutaredoxins(e.g., GLRX) are a family of glutathione-dependent hydrogen donors that participate in a variety of cellular redox reactions. By sequence analysis, Lundberg et al.(2001) and Gladyshev et al.(2001) identified the GLRX2 gene within a clone mapping to chromosome 1q31.2-q31.3. Lundberg et al.(2001) determined that the GLRX2 gene contains 5 exons spanning about 9.6 kb. The GLRX2B transcript uses a first exon(exon 1B) located upstream from the first exon used by the GLRX2A transcript(exon 1A), suggesting that alternative splicing generates the isoforms. Lundberg et al.(2001)assayed reductase activity in recombinant proteins of both GLRX2 isoforms. They found that both have GSH-dependent dehydroascorbate reductase activity and 2-hydroxyethyl disulfide reductase activity.