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Anti-Glutaredoxin 2 Antibody

Catalog # ABO11192

Specification

Anti-Glutaredoxin 2 Antibody - Product Information

Application	**WB, IHC**
Primary Accession	Q9NS18
Host	**Rabbit**
Reactivity	**Human, Mouse, Rat**
Clonality	**Polyclonal**
Format	**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 µg/ml, Human, Rat, Mouse, By Heat
Western blot, 0.1-0.5 µg/ml, Human, Rat, Mouse

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
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-Glutaredoxin 2 Antibody - Images

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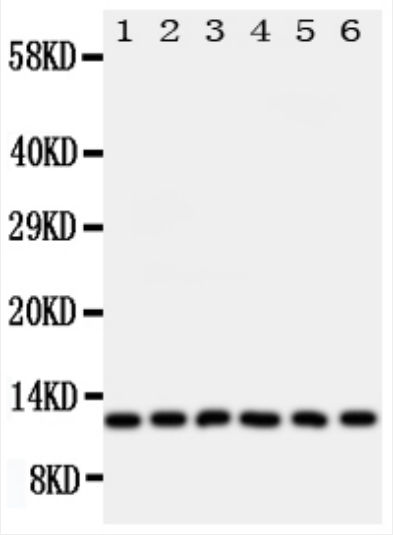
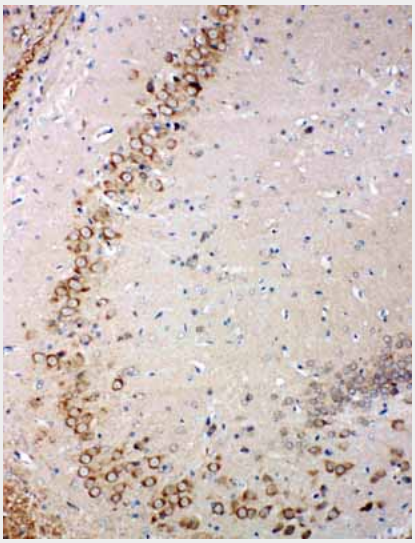


Anti-Glutaredoxin 2 antibody, ABO11192, Western blottingLane 1: Rat Testis Tissue LysateLane 2: HELA Cell LysateLane 3: U87 Cell LysateLane 4: NEU Cell LysateLane 5: JURKAT Cell LysateLane 6: MCF-7 Cell Lysate



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.