

Anti-Glutaredoxin 2 Antibody

Catalog # ABO11192

Product Information

Application	WB, IHC-P
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.

Additional Information

Gene ID	51022
Other Names	Glutaredoxin-2, mitochondrial, GLRX2, GRX2
Calculated MW	18052
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. .
Source	Eukaryota
Protein Name	Glutaredoxin-2, mitochondrial
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg Thimerosal, 0.05mg Na ₃ .
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.

Protein Information

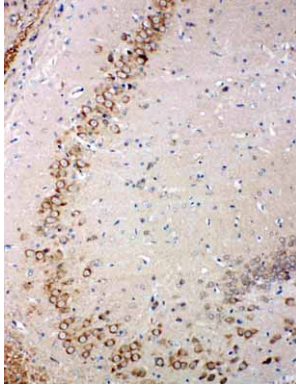
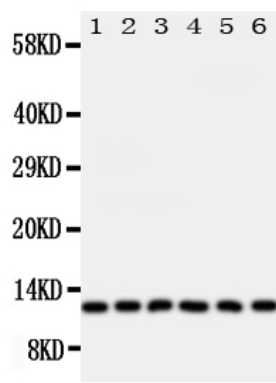
Name	GLRX2
Synonyms	GRX2
Function	Glutathione-dependent oxidoreductase that facilitates the maintenance of mitochondrial redox homeostasis upon induction of apoptosis by oxidative stress. Involved in response to hydrogen peroxide and regulation of apoptosis caused by oxidative stress. Acts as a very 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

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.

Images

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



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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.