

GLRX2 Antibody (C-term T135)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP7301B

Product Information

Application Primary Accession	IHC-P, FC, WB, E <u>Q9NS18</u>
Other Accession	<u>Q32L67</u>
Reactivity	Human, Rat, Mouse
Predicted	Bovine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	18052
Antigen Region	120-146

Additional Information

Gene ID	51022
Other Names	Glutaredoxin-2, mitochondrial, GLRX2, GRX2
Target/Specificity	This GLRX2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 120-146 amino acids from the C-terminal region of human GLRX2.
Dilution	IHC-P~~1:100~500 FC~~1:10~50 WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	GLRX2 Antibody (C-term T135) is for research use only and not for use in diagnostic or therapeutic procedures.

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 are a family of glutathione-dependent hydrogen donors that participate in a variety of cellular redox reactions.

References

Lundberg M., Johansson C. J. Biol. Chem. 276:26269-26275(2001) Gladyshev V.N., Liu A. J. Biol. Chem. 276:30374-30380(2001) Lillig C.H. Proc. Natl. Acad. Sci. U.S.A. 101:13227-13232(2004)

Images



Western blot analysis of GLRX2 antibody (C-term T135) (Cat.#AP7301b) in mouse cerebellum tissue lysates (35ug/lane). GLRX2 (arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human brain reacted with GLRX2 Antibody (C-term T135), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



Flow cytometric analysis of hela cells using GLRX2 Antibody (C-term T135)(bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

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