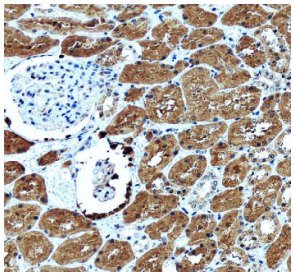
GLRX Antibody / Glutaredoxin 1 (RQ8925)

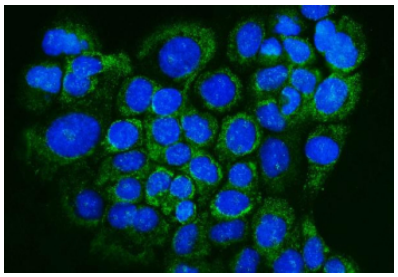
Catalog No.	Formulation	Size
RQ8925	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

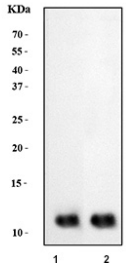
Availability	1-2 business days
Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P35754
Localization	Cytoplasmic
Applications	Western Blot : 1-2ug/ml Immunohistochemistry (FFPE) : 2-5ug/ml Flow Cytometry : 1-3ug/million cells Immunofluorescence : 5ug/ml ELISA : 0.1-0.5ug/ml
Limitations	This GLRX antibody is available for research use only.



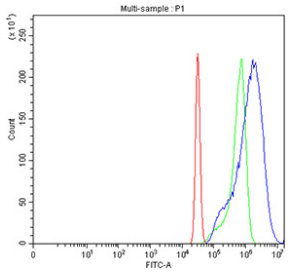
IHC staining of FFPE human kidney tissue with GLRX antibody, HRP-secondary and DAB substrate. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Immunofluorescent staining of FFPE human A431 cells with GLRX antibody (green) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



Western blot testing of 1) human HepG2 and 2) human PC-3 cell lysate with GLRX antibody. Predicted molecular weight ~12 kDa.



Flow cytometry testing of fixed and permeabilized human HeLa cells with GLRX antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= GLRX antibody.

Description

GLRX (Glutaredoxin 1) is a small redox enzyme that belongs to the thioredoxin family and plays an essential role in maintaining cellular redox homeostasis. It catalyzes the reversible reduction of protein disulfides and mixed disulfides formed between proteins and glutathione, a process known as deglutathionylation. This activity regulates protein function, protects against oxidative stress, and ensures proper signal transduction. Researchers frequently use a GLRX antibody to investigate antioxidant defense systems, redox regulation, and stress responses.

GLRX is widely expressed in mammalian tissues, with particularly high levels in heart, liver, and skeletal muscle. Its enzymatic activity is critical in pathways that counteract oxidative damage and maintain the thiol status of proteins. Dysregulation of GLRX has been linked to cardiovascular disease, neurodegenerative disorders, and cancer, where imbalances in redox signaling contribute to disease pathology. Employing a GLRX antibody allows scientists to analyze protein expression, localization, and post-translational modifications in health and disease.

In addition to its protective role, GLRX has been implicated in apoptosis, inflammatory responses, and mitochondrial function. It also interacts with iron-sulfur cluster proteins, influencing mitochondrial biogenesis and energy metabolism. Because oxidative stress is a common hallmark of many diseases, GLRX remains an attractive target for translational research. Using a GLRX antibody provides a reliable approach for monitoring its activity and contribution to cellular redox control.

NSJ Bioreagents provides a high-quality GLRX antibody validated for applications such as western blot, immunohistochemistry, and immunofluorescence. Choosing a GLRX antibody from NSJ Bioreagents ensures consistent performance and reproducibility in studies of oxidative stress, redox regulation, and disease mechanisms.

Application Notes

Optimal dilution of the GLRX antibody should be determined by the researcher.

Immunogen

A human recombinant partial protein (amino acids M1-Q106) was used as the immunogen for the GLRX antibody.

Storage

After reconstitution, the GLRX antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Ordering: Phone: 858.663.9055 | Fax: 1.267.821.0800 | Email: info@nsjbio.com