

#### DESCRIPTION

|                                                                                                                                                                                                         |                                                                                                       |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b>                                                                                                                                                                               | Human                                                                                                 |
| <b>Specificity</b>                                                                                                                                                                                      | Detects human Glutaredoxin 3/GLRX3 in ELISAs.                                                         |
| <b>Source</b>                                                                                                                                                                                           | Monoclonal Mouse IgG <sub>2B</sub> Clone # 791431                                                     |
| <b>Purification</b>                                                                                                                                                                                     | Protein A or G purified from hybridoma culture supernatant                                            |
| <b>Immunogen</b>                                                                                                                                                                                        | <i>E. coli</i> -derived recombinant human Glutaredoxin 3/GLRX3<br>Asn126-Lys294<br>Accession # O76003 |
| <b>Conjugate</b>                                                                                                                                                                                        | Alexa Fluor 405<br>Excitation Wavelength: 405 nm<br>Emission Wavelength: 421 nm                       |
| <b>Formulation</b>                                                                                                                                                                                      | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide                                          |
| *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |                                                                                                       |

#### APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

|                            |                                                                        |
|----------------------------|------------------------------------------------------------------------|
| <b>Western Blot</b>        | Optimal dilution of this antibody should be experimentally determined. |
| <b>Immunocytochemistry</b> | Optimal dilution of this antibody should be experimentally determined. |

#### PREPARATION AND STORAGE

|                                |                                                                                                                   |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <b>Shipping</b>                | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. |
| <b>Stability &amp; Storage</b> | Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied                          |

#### BACKGROUND

GLRX3 (Glutaredoxin 3; also PICOT, PKC-theta-interacting protein, and Thioredoxin-like protein 2/TXNL2) is a 37-40 kDa member of the multidomain subgroup, monothiol glutaredoxin group of glutaredoxin/GTX proteins. It has widespread expression but is not found ubiquitously. Cells known to express cytosolic GLRX3 are principally epithelial in type, and include breast and adrenal epithelium, pancreatic exocrine gland epithelium, and proximal tubule renal epithelium. Cardiac muscle may also express GLRX3. By inference, it is suggested to be involved in cell proliferation and has also been associated with both PKC-theta regulation and MLP/muscle LIM protein-mediated cardiac contractility. Human GLRX3 is 335 amino acids (aa) in length. It contains an N-terminal thioredoxin-like domain (aa 2-117) that is followed by two PICOT homology domains (aa 144-236 and 237-335). The thioredoxin domain does not possess a typical disulfide, and it is suggested that this domain does not demonstrate redox activity. The PICOT domains will interact with intracellular proteins. GLRX3 exists as both a monomer and homodimer, with the homodimer incorporating two Fe/S clusters into their PICOT domains. These clusters serve as redox sensors within the cell. Over aa 126-294, human GLRX3 shares 98% aa sequence identity with mouse GLRX3.

#### PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.