# Peroxiredoxin-2 (PRDX2) ELISA Kit for Porcine

## PRODUCT OVERVIEW

| | |
|---|---|
| **Product Name** | Peroxiredoxin-2 (PRDX2), ELISA Kit |
| **Full Product Name** | Porcine Peroxiredoxin-2 ELISA Kit |
| **Product Gene Name** | PRDX2 elisa kit |
| **Species Reactivity** | Porcine |
| **Assay Type** | Sandwich |
| **Preparation and Storage** | Store all reagents at 2-8 degree C |
| **Molecular Weight** | 21,892 Da |
| **Chromosome Location** | Chromosome: 19; NC_000019.9 (12907634..12912694, complement). Location: 19p13.2 |
| **OMIM** | 600538 |
| **3D Structure** | ModBase 3D Structure for P32119 |
| **Related Product Information for PRDX2 elisa kit** | MBS008151 is a ready-to-use microwell, strip plate ELISA (enzyme-linked immunosorbent assay) Kit for analyzing the presence of the Peroxiredoxin-2 (PRDX2) ELISA Kit target analytes in biological samples. The concentration gradients of the kit standards or positive controls render a theoretical kit detection range in biological research samples containing PRDX2. The ELISA analytical biochemical technique of the MBS008151 kit is based on PRDX2 antibody-PRDX2 antigen interactions (immunosorbency) and an HRP colorimetric detection system to detect PRDX2 antigen targets in samples. The ELISA Kit is designed to detect native, not recombinant, PRDX2. Appropriate sample types may include undiluted body fluids and/or tissue homogenates, secretions. Quality control assays assessing reproducibility identified the intra-assay CV (%) and inter-assay CV(%). |
| **Other Notes** | Small volumes of PRDX2 elisa kit vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply. |

## ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for PRDX2. It may not necessarily be applicable to this product.

| | |
|---|---|
| **NCBI GI #** | 49456535 |
| **NCBI GeneID** | 7001 |
| **NCBI Accession #** | CAG46588.1 |
| **UniProt Primary Accession #** | P32119 |
| **UniProt Secondary Accession #** | P31945; P32118; P35701; Q6FHG4; Q92763; Q9UC23; A8K0C0 |
| **UniProt Related Accession #** | P32119 |
| **NCBI Official Full Name** | PRDX2 |
| **NCBI Official Synonym Full Names** | peroxiredoxin 2 |
| **NCBI Official Symbol** | PRDX2 |
| **NCBI Official Synonym Symbols** | PRP; TSA; PRX2; PTX1; TPX1; NKEFB; PRXII; TDPX1; NKEF-B |
| **UniProt Protein Name** | Peroxiredoxin-2 |

| | |
|---|---|
| **UniProt Synonym Protein Names** | Natural killer cell-enhancing factor B; NKEF-B; PRP; Thiol-specific antioxidant protein; TSA; Thioredoxin peroxidase 1; Thioredoxin-dependent peroxide reductase 1 |
| **Protein Family** | Peroxiredoxin |
| **UniProt Gene Name** | PRDX2 |
| **UniProt Synonym Gene Names** | NKEFB; TDPX1; NKEF-B; TSA |
| **UniProt Entry Name** | PRDX2_HUMAN |
| **NCBI Protein Information** | peroxiredoxin-2; torin; thioredoxin peroxidase 1; thiol-specific antioxidant 1; natural killer cell-enhancing factor B; thioredoxin-dependent peroxide reductase 1 |
| **NCBI Summary for PRDX2** | This gene encodes a member of the peroxiredoxin family of antioxidant enzymes, which reduce hydrogen peroxide and alkyl hydroperoxides. The encoded protein plays an antioxidant protective role in cells, and it may contribute to the antiviral activity of CD8(+) T-cells. The crystal structure of this protein has been resolved to 2.7 angstroms. This protein prevents hemolytic anemia from oxidative stress by stabilizing hemoglobin, thus making this gene a therapeutic target for patients with hemolytic anemia. This protein may have a proliferative effect and play a role in cancer development or progression. Related pseudogenes have been identified on chromosomes 5, 6, 10 and 13. [provided by RefSeq, Mar 2013] |
| **UniProt Comments for PRDX2** | PRDX2: a member of the peroxiredoxin family of antioxidant enzymes, which reduce hydrogen peroxide and alkyl hydroperoxides. Involved in redox regulation of the cell. Reduces peroxides with reducing equivalents provided through the thioredoxin system but not from glutaredoxin. May play an important role in eliminating peroxides generated during metabolism. Might participate in the signaling cascades of growth factors and tumor necrosis factor-alpha by regulating the intracellular concentrations of H(2)O(2). May have a proliferative effect and play a role in cancer development or progression. Three splice-variant isoforms have been identified.<br><br>Protein type: EC 1.11.1.15; Oxidoreductase<br><br>Chromosomal Location of Human Ortholog: 19p13.2<br><br>Cellular Component: cytoplasm; cytosol<br><br>Molecular Function: antioxidant activity; thioredoxin peroxidase activity<br><br>Biological Process: regulation of apoptosis; response to reactive oxygen species; removal of superoxide radicals; hydrogen peroxide catabolic process; negative regulation of neuron apoptosis; response to oxidative stress; negative regulation of apoptosis |
| **Research Articles on PRDX2** | **1.** Real-time PCR, western blot and immunohistochemistry showed that peroxiredoxin 2 was increased in pterygium compared to healthy conjunctiva. |
| **Precautions** | All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines. |
| **Disclaimer** | While every efforts were made to ensure the accuracy of the information provided in this datasheet, MyBioSource will not be liable for any omissions or errors contained herein. MyBioSource reserves the right to make changes to this datasheet at any time without prior notice.<br><br>It is the responsibility of the customer to report product performance issues to MyBioSource within 30 days of receipt of the product. Please visit our Terms & Conditions page for more information. |
| **Product Note** | Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details. |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures.

**MyBioSource** | Tel: +1.858.633.0165 | Fax: +1.858.633.0166 | mybiosource.com/contact-us
Online datasheet: https://www.mybiosource.com/prdx2-porcine-elisa-kits/peroxiredoxin-2/8151