

# Bovine Thioredoxin-dependent peroxide reductase, mitochondrial (PRDX3) ELISA Kit

Catalog No: #EK8335

Orders: [order@signalwayantibody.com](mailto:order@signalwayantibody.com)

Package Size: #EK8335-1 48T #EK8335-2 96T

Support: [tech@signalwayantibody.com](mailto:tech@signalwayantibody.com)

## Description

Product Name	Bovine Thioredoxin-dependent peroxide reductase, mitochondrial (PRDX3) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Bovine (Bos taurus; Cattle)
Other Names	AOP-1; AOP1; MER5; MGC104387; MGC24293; PRO1748; SP-22; antioxidant protein 1 thioredoxin-dependent peroxide reductase
Accession No.	P35705
Uniprot	P35705
GeneID	281998;
Storage	The stability of ELISA kit is determined by the loss rate of activity. The loss rate of this kit is less than 5% within the expiration date under appropriate storage condition.  The loss rate was determined by accelerated thermal degradation test. Keep the kit at 37C for 4 and 7 days, and compare O.D.values of the kit kept at 37C with that of at recommended temperature. (referring from China Biological Products Standard, which was calculated by the Arrhenius equation. For ELISA kit, 4 days storage at 37C can be considered as 6 months at 2 - 8C, which means 7 days at 37C equaling 12 months at 2 - 8C).

## Application Details

Detect Range:Request Information

Sensitivity:Request Information

Sample Type:Serum, Plasma, Other biological fluids

Sample Volume: 1-200 µL

Assay Time:1-4.5h

Detection wavelength:450 nm

## Product Description

**Detection Method:**SandwichTest principle:This assay employs a two-site sandwich ELISA to quantitate PRDX3 in samples. An antibody specific for PRDX3 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyPRDX3 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for PRDX3 is added to the wells. After washing, Streptavidin conjugated Horseradish Peroxidase (HRP) is added to the wells. Following a wash to remove any unbound avidin-enzyme reagent, a substrate solution is added to the wells and color develops in proportion to the amount of PRDX3 bound in the initial step. The color development is stopped and the intensity of the color is measured.**Product Overview:**PRDX3 encodes a protein with antioxidant function and is localized in the mitochondrion. This gene shows significant nucleotide sequence similarity to the gene coding for the C22 subunit of Salmonella typhimurium alkylhydroperoxide reductase. Expression of this gene product in E. coli deficient in the C22-subunit gene rescued resistance of the bacteria to alkylhydroperoxide. The human and mouse genes are highly conserved, and they map to the regions syntenic between mouse and human chromosomes. Sequence comparisons with recently cloned mammalian homologues suggest that these genes consist of a family that is responsible for regulation of cellular proliferation, differentiation, and antioxidant functions. Two transcript variants encoding two different isoforms have been found for this gene.

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Note: This product is for in vitro research use only