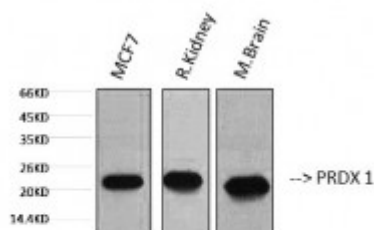


Anti-Peroxiredoxin 1 antibody



Western Blot (WB) analysis of 1. MCF7 2. Rat Kidney 3. Mouse Brain cells using Peroxiredoxin 1 Monoclonal Antibody, (STJ97014)



Description

Peroxiredoxin 1 is a protein encoded by the PRDX1 gene which is approximately 22,1 kDa. Peroxiredoxin 1 is localised to the cytoplasm and melanosome. It is involved in gene expression, glucose and energy metabolism and cellular senescence. This protein falls under the peroxiredoxin family of antioxidant enzymes, which reduce hydrogen peroxide and alkyl hydroperoxides. It may play an antioxidant protective role in cells, and may contribute to the antiviral activity of CD8⁺ T-cells. It may also play a role in cancer development or progression. Peroxiredoxin 1 is expressed in the nervous system, liver, lung, skin and pancreas. Mutations in the PRDX1 gene may result in anthrax disease. STJ97014 was developed from clone 8E7 and was affinity-purified from mouse ascites by affinity-chromatography using specific immunogen. The antibody detects endogenous Peroxiredoxin 1 protein.

Model	STJ97014
Host	Mouse
Reactivity	Human, Mouse, Rat
Applications	IF, WB
Immunogen	Recombinant Protein
Gene ID	5052
Gene Symbol	PRDX1
Dilution range	WB 1:1000-3000IF 1:100-200
Specificity	The antibody detects endogenous Peroxiredoxin 1 protein.
Purification	The antibody was affinity-purified from mouse ascites by affinity-

chromatography using specific immunogen.

Clone ID	80000000
Note	For Research Use Only (RUO).
Protein Name	Peroxiredoxin-1 Natural killer cell-enhancing factor A NKEF-A Proliferation-associated gene protein PAG Thioredoxin peroxidase 2 Thioredoxin-dependent peroxide reductase 2
Clonality	Monoclonal
Conjugation	Unconjugated
Isotype	IgG1
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:9352OMIM:176763
Alternative Names	Peroxiredoxin-1 Natural killer cell-enhancing factor A NKEF-A Proliferation-associated gene protein PAG Thioredoxin peroxidase 2 Thioredoxin-dependent peroxide reductase 2
Function	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). Reduces an intramolecular disulfide bond in GDPD5 that gates the ability to GDPD5 to drive postmitotic motor neuron differentiation .
Cellular Localization	Cytoplasm Melanosome. Identified by mass spectrometry in melanosome fractions from stage I to stage IV.
Post-translational Modifications	Phosphorylated on Thr-90 during the M-phase, which leads to a more than 80% decrease in enzymatic activity.