

PRX I Polyclonal Antibody

Catalog No: YT5455

Reactivity: Human; Mouse; Rat

Applications: WB;IHC;IF;ELISA

Target: Prdx1

Fields: >>Peroxisome;>>Amoebiasis

Q06830

P35700

Gene Name: PRDX1

Protein Name: Peroxiredoxin-1

Human Gene Id: 5052

Human Swiss Prot

Iuman Swiss Fro

No:

Mouse Gene Id: 18477

Mouse Swiss Prot

No:

Rat Gene ld: 117254

Rat Swiss Prot No: Q63716

Immunogen: The antiserum was produced against synthesized peptide derived from the

Internal region of human PRDX1. AA range:31-80

Specificity: PRX I Polyclonal Antibody detects endogenous levels of PRX I protein.

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

Dilution: WB 1:500 - 1:2000. IHC: 1:100-1:300. ELISA: 1:20000.. IF 1:50-200

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Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 21kD

Background : This gene encodes a member of the peroxiredoxin family of antioxidant

enzymes, which reduce hydrogen peroxide and alkyl hydroperoxides. The encoded protein may play an antioxidant protective role in cells, and may contribute to the antiviral activity of CD8(+) T-cells. This protein may have a proliferative effect and play a role in cancer development or progression. Four transcript variants encoding the same protein have been identified for this gene.

[provided by RefSeq, Jan 2011],

Function: catalytic activity: 2 R'-SH + ROOH = R'-S-S-R' + H(2)O +

ROH.,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).,induction:Constitutively expressed in most human cells; is induced to

higher levels upon serum stimulation in untransformed and transformed

cells.,miscellaneous:Inactivated upon oxidative stress by overoxidation of Cys-52 to Cys-SO(2)H and Cys-SO(3)H. Cys-SO(2)H is retroreduced to Cys-SOH after

removal of H(2)O(2), while Cys-SO(3)H may be irreversibly

oxidized., miscellaneous: The active site is the redox-active Cys-52 oxidized to Cys-

SOH.

Subcellular Location : Cytoplasm . Melanosome . Identified by mass spectrometry in melanosome

fractions from stage I to stage IV.

Expression: Brain, Cajal-Retzius cell, Fetal brain cortex, Urinary bladder,

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