PRX I Rabbit pAb

CatalogNo: YT5455

Key Features

Host Species	Reactivity	Applications
• Rabbit	• Human,Mouse,Rat	• WB,IHC,IF,ELISA

MW	Isotype
• 21kD (Observed)	• IgG

Recommended Dilution Ratios

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

Storage

Storage*	-15°C to -25°C/1 year(Do not lower than -25°C)
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Basic Information

Clonality	Polyclonal

Immunogen Information

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.

Target Information

Gene name PRDX1

Protein Name Peroxiredoxin-1

Organism	Gene ID	UniProt ID
Human	5052;	Q06830;
Mouse	18477;	P35700;
Rat	117254;	Q63716;

Cellular Localization Cytoplasm . Melanosome . Identified by mass spectrometry in melanosome fractions from stage I to stage IV.

Tissue specificity Brain,Cajal-Retzius cell,Fetal brain cortex,Urinary bladder,

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. Cys-SOH rapidly reacts with Cys-173-SH of the other subunit to form an intermolecular disulfide with a concomitant homodimer formation. The enzyme may be subsequently regenerated by reduction of the disulfide by thioredoxin.,PTM:Phosphorylated on Thr-90 during the M-phase, which leads to a more than 80% decrease in enzymatic activity.,similarity:Belongs to the ahpC/TSA family.,similarity:Contains 1 thioredoxin domain.,subcellular location:Identified by mass spectrometry in melanosome fractions from stage I to stage IV.,subunit:Homodimer; disulfide-linked, upon oxidation (By similarity). May form heterodimers with AOP2.,

Validation Data

Contact information

Orders: order@immunoway.com
Support: tech@immunoway.com
Telephone: 877-594-3616 (Toll Free), 408-747-0185
Website: http://www.immunoway.com
Address: 2200 Ringwood Ave San Jose, CA 95131 USA

Please scan the QR code to access additional product information:
PRX I Rabbit pAb