ELK Biotechnology

Recombinant Human PRDX1 (N, C-6His)

Catalog #	EPT198
Expression Host	E.coli
DESCRIPTION	Recombinant Human Peroxiredoxin-1 is produced by our E.coli expression system and the target gene encoding Met1-Lys199 is expressed with a 6His tag at the N-terminus, 6His tag at the C-terminus.
Accession	Q06830
Synonyms	Peroxiredoxin-1;Natural killer cell-enhancing factor A;NKEF-A;Proliferation-associated gene protein;PAG;Thioredoxin peroxidase 2;Thioredoxin-dependent peroxide reductase 2;PAGA; PAGB; TDPX2
Mol Mass	25.3 KDa
AP Mol Mass	26 KDa, reducing conditions
Purity	Greater than 95% as determined by reducing SDS-PAGE.
Endotoxin	Less than 0.1 ng/μg (1 EU/μg) as determined by LAL

test.

FORMULATION Supplied as a 0.2 μm filtered solution of PBS, 10% Glycerol, 0.1mM DTT, pH 6.0.

RECONSTITUTION

SHIPPING The product is shipped on dry ice/polar packs.

Upon receipt, store it immediately at the temperature listed below.

STORAGE Store at ≤-70°C, stable for 6 months after receipt.

Store at ≤-70°C, stable for 3 months under sterile conditions after opening.

Please minimize freeze-thaw cycles.

BACKGROUND Peroxiredoxin-1(PRDX1) contains 1 thioredoxin domain and belongs to the AhpC/TSA family. PRDX1 constitutively expressed in most human cells and it is induced to higher levels upon serum stimulation in untransformed and transformed cells. PRDX1 is involved in redox regulation of the cell. It reduces peroxides with reducing equivalents provided through the thioredoxin system but not from glutaredoxin and play an important role in eliminating peroxides generated during metabolism. PRDX1 might participate in the signaling cascades of growth factors

and tumor necrosis factor-alpha by regulating the intracellular concentrations of H2O2. It reduces an intramolecular disulfide bond in GDPD5 that gates the ability to GDPD5 to drive postmitotic motor neuron differentiation. It may contribute to the antiviral activity of CD8(+) T-cells and have a proliferative effect in cancer development or progression.

SDS-PAGE