

Recombinant Human Peroxiredoxin 1/PRDX1 Protein (His Tag)

Catalog No. PKSH032881

Note: Centrifuge before opening to ensure complete recovery of vial contents.

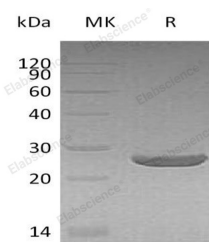
Description

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;MSP23;NKEF-A;NKEFA;PAG;PRX1;PRXI;TDPX2
Species	Human
Expression Host	E.coli
Sequence	Met 1-Lys199
Accession	Q06830
Calculated Molecular Weight	25.3 kDa
Observed molecular weight	26 kDa
Tag	N-His & C-His
Bioactivity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.
Shipping	This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at < - 20°C.
Formulation	Supplied as a 0.2 µm filtered solution of PBS, 10% glycerol, 0.1mM DTT,pH 6.0.
Reconstitution	Not Applicable

Data



> 95 % as determined by reducing SDS-PAGE.

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

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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- α by regulating the intracellular concentrations of H_2O_2 . 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.