

Recombinant Human Peroxiredoxin 1/PRDX1 Protein (His Tag)

Catalog Number: PKSH032881

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

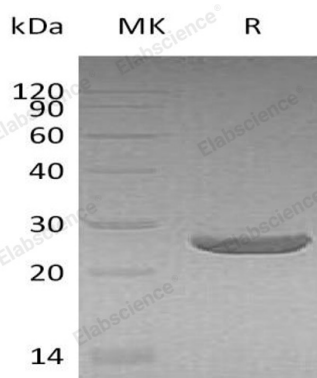
Description

Species	Human
Source	E.coli-derived Human Peroxiredoxin 1;PRDX1 protein Met 1-Lys 199, with an N-terminal His & C-terminal His
Calculated MW	25.3 kDa
Observed MW	26 kDa
Accession	Q06830
Bio-activity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Concentration	Subject to label value.
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.

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 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.

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