



Recombinant Protein Technical Manual

Recombinant Mouse Peroxiredoxin 1/PRDX1 Protein (His Tag) RPES1291

Product Data:

Product SKU: RPES1291

Size: 20µg

Species: Mouse

Expression host: E. coli

Uniprot: P35700

Protein Information:

Molecular Mass: 23.5 kDa

AP Molecular Mass: 27 kDa

Tag: C-His

Bio-activity:

Purity: > 85 % as determined by SDS-PAGE

Endotoxin: Please contact us for more information.

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile PBS, 10% glycerol, pH 7.4

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: MSP23;NkefA;OSF-3;OSF3;PAG;Paga;Prdx1;prx1;Prxl;Tdp2;TDX2;TPxA

Immunogen Information:

Sequence: Met 1-Lys 199

Background:

Peroxiredoxin, also known as Thioredoxin peroxidase 2, Natural killer cell-enhancing factor A, PRDX1, and PAGA, is a member of the ahpC/TSA family. Peroxiredoxin is constitutively expressed in most human cells. It is induced to higher levels upon serum stimulation in untransformed and transformed cells. Peroxiredoxins (PRDXs) are a family of antioxidant enzymes that are also known as scavengers of peroxide in mammalian cells. The overexpression of Peroxiredoxin, which is one of the peroxiredoxins that is a ubiquitously expressed protein, was related to a poor prognosis in several types of human cancers. Peroxiredoxin is involved in redox regulation of the cell. It reduces peroxides with reducing equivalents provided through the thioredoxin system but not from glutaredoxin and may play an important role in eliminating peroxides generated during metabolism. Peroxiredoxin might participate in the signaling cascades of growth factors and tumor necrosis factor- α by regulating the intracellular concentrations of H₂O₂. The reduced Peroxiredoxin expression is an important factor in esophageal squamous cancer progression and could serve as a useful prognostic marker.