



Recombinant Protein Technical Manual

Recombinant Human PRDX5 Isoform cytoplasmic + peroxisomal Protein (His Tag)

RPES1638

Product Data:

Product SKU: RPES1638

Size: 20µg

Species: Human

Expression host: E. coli

Uniprot: P30044-2

Protein Information:

Molecular Mass: 18.5 kDa

AP Molecular Mass: 18.5 kDa

Tag: N-His

Bio-activity:

Purity: > 95 % as determined by reducing 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 50mM Tris, pH 7.5

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

Application:

Synonyms: ACR1;AOEB166;B166;HEL-S-55;PLP;PMP20;PRDX6;prx-V;PRXV;SBBI10

Immunogen Information:

Sequence: Met 53-Leu 214

Background:

Peroxiredoxin-5, also known as Alu corepressor 1, Antioxidant enzyme B166, Liver tissue 2D-page spot 71B, Peroxisomal antioxidant enzyme, Thioredoxin peroxidase PMP20, Thioredoxin reductase, PRDX5 and ACR1, is cytoplasm protein which belongs to the peroxiredoxin 2 family. Peroxiredoxin-5 / PRDX5 reduces hydrogen peroxide and alkyl hydroperoxides with reducing equivalents provided through the thioredoxin system. Peroxiredoxin-5 / PRDX5 is involved in intracellular redox signaling. The Peroxiredoxins / Prx are a family of 25 kDa peroxidases that can reduce H₂O₂ using an electron from thioredoxin (Trx) or other substances. The mammalian Peroxiredoxins / Prx family is divided into six groups (PRDX1, PRDX2, PRDX3, PRDX4, PRDX5, PRDX6) on the basis of homology of amino acid sequences. They are located in the cytosol and play a role in the cell signaling system. All six mammalian peroxiredoxins are expressed in the lung. Peroxiredoxins / Prx is overexpressed in breast cancer tissues to a great extent suggesting that Peroxiredoxins / Prx has a proliferative effect and may be related to cancer development or progression.