

**Recombinant Human Peroxiredoxin 1 / PRDX1 Protein (His tag)****Cat.NO.: TP07779**

3th Edition

**Synonyms:**MSP23;NKEF-A;NKEFA;PAG;PAGA;PAGB;PRX1;PRXI;TDPX2

**Description:**Peroxiredoxin-1, also known as Thioredoxin peroxidase 2, Natural killer cell-enhancing factor A, PRDX1, and PAGA, is a member of the ahpC/TSA family. Peroxiredoxin-1 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-1, 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-1 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-1 Might participate in the signaling cascades of growth factors and tumor necrosis factor- $\alpha$  by regulating the intracellular concentrations of H<sub>2</sub>O<sub>2</sub>. The reduced Peroxiredoxin-1 expression is an important factor in esophageal squamous cancer progression and could serve as a useful prognostic marker.

**Form:**PBS**Molecular Weight:**22.9 kDa**Sequences:**Met 1-Lys 199**Purity:**> 95% by HPLC**Concentration:****Endotoxin Level:**<1.0 EU per 1 ug of protein (determined by LAL method)

**Storage:**Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.