

## 32-8343: Recombinant Human Peroxiredoxin-1/PRDX1 (N, C-6His)

**Gene :** PRDX1  
**Gene ID :** 5052  
**Uniprot ID :** Q06830

### Description

Source: E. coli.  
MW :25.3kD.

Recombinant Human Peroxiredoxin-1 is produced by our E.coli expression system and the target gene encoding Met1-Lys199 is expressed with a 6His tag at the N-terminus, 6His tag at the C-terminus. 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 H<sub>2</sub>O<sub>2</sub>. 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.

### Product Info

**Amount :** 10 µg / 50 µg  
**Content :** Supplied as a 0.2 µm filtered solution of PBS, 10% glycerol, 0.1mM DTT,pH 6.0.  
**Storage condition :** Store at -20°C, stable for 6 months after receipt. Please minimize freeze-thaw cycles.  
**Amino Acid :** MGSSHHHHHHSSGLVPRGSHMSSGNAKIGH PAPNFKATAVMPDGQFKDISLSYKGGKYVFFFYPLDFTFVCP  
TEIIAFSDRAEEFKKLNQVIGASVDSHFCHLAWVNTPKKQGGLGPMNIPLVSDPKRTIAQDYGVLKADEGISFR  
GLFIIDDKGILRQITVNDLPVGRSVDETLRLVQAFQFTDKHGEVCPAGWKPGSDTIKPDVQKSKEYFSKQKLEHH  
HHHH

### Application Note

**Endotoxin :** Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test.