

## PRDX5

## Recombinant Human Peroxiredoxin-5

<b>Catalog No.</b>	CS461A CS461B CS461C	<b>Quantity:</b>	5 µg 20 µg 1 mg
<b>Alternate Names:</b>	SBBI10, ACR1, AOEB166, B166, HEL-S-55, PLP, PMP20, PRDX6, PRXV		
<b>Description:</b>	<p>Peroxiredoxin-5 belongs to the peroxiredoxin family of antioxidant enzymes, which reduce hydrogen peroxide and alkyl hydroperoxides with reducing equivalents supplied through the thioredoxin system. PRDX5 has an antioxidant protective function in different tissues under normal conditions and during inflammatory processes. Peroxiredoxin-5 interacts with peroxisome receptor 1 and is involved in intracellular redox signaling. PRDX5 is involved in intracellular redox signaling. Peroxiredoxin-5 is a significant antioxidant protein of lung epithelial cells for its expression in the human lung increases during inflammation. PRDX5 expression is upregulated in osteoarthritis. PRDX5 may be significant in mitochondrial genome stability. Peroxiredoxin-5 has a protective role in human tendon cells against oxidative stress by reducing apoptosis and upholding collagen synthesis.</p> <p>Recombinant Human PRDX5 is a single, non-glycosylated, polypeptide chain containing 162 amino acids (aa 53-214) and purified by proprietary chromatographic techniques.</p>		
<b>Gene ID:</b>	25824		
<b>Source:</b>	<i>E. coli</i>		
<b>Molecular Weight:</b>	17 kD		
<b>Formulation:</b>	Sterile filtered colorless solution containing 20 mM HEPES buffer, pH 7.4.		
<b>Purity:</b>	>95.0% as determined by SDS-PAGE.		
<b>Specific Activity:</b>	The specific activity was found to be approximately 117-136 pmole/min/µg. The enzymatic activity was confirmed by measuring the remaining peroxide after incubation of PRDX5 and peroxide for 20 min at room temperature. Specific activity is defined as the amount of hydroperoxide that 1 ug of enzyme can reduce at 25°C for 1 minute.		
<b>Amino Acid Sequence:</b>	MAPIKVGDAI PAVEVFEGEP GNKVNLAELF KGKKGVLFV PGAFTPGCSK THLPGFVEQA EALKAKGVQV VACLSVNDAF VTGEWGRAHK AEGKVRLAD PTGAFGKETD LLLDDSLVSI FGNRRLLKRFS MVVQDGIVKA LNVEPDGTGL TCSLAPNIIS QL		
<b>Storage &amp; Stability:</b>	PRDX5 although stable 2-4°C for 4 weeks, should be stored desiccated at -20°C to -80° C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). <b>Please prevent freeze-thaw cycles.</b>		

NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

