## ACTIVE PROTEIN



## Peroxiredoxin VI (Human)

**Background**: Peroxiredoxin (Prx) is a growing peroxidase family, whose mammalian members have been known to connect with cell proliferation, differentiation, and apoptosis.

Many isoforms (about 50 proteins), collected in accordance to the amino acid sequence homology, particularly amino-terminal region containing active site cysteine residue, and the thiol-specific antioxidant activity, distribute throughout all the kingdoms. Among them, mammalian Prx consists of 6 different members grouped into typical 2-Cys, atypical 2-Cys Prx, and 1-Cys Prx. Except Prx VI belonging to 1-Cys Prx subgroup, the other five 2-Cys Prx isotypes have the thioredoxin-dependent peroxidase utilizing activity thioredoxin, thioredoxin reductase, and NADPH as a reducing system. Mammalian Prxs are 20 -30 kilodalton in molecular size and vary in subcellular localization: Prx I, II, and VI in cytosol, Prx III in mitochondria, Prx IV in ER and secretion, Prx V showing complicated including peroxisome, distribution mitochondria and cytosol (1).

**Source** : Purified from *E.coli* expressing the

human Peroxiredoxin VI gene

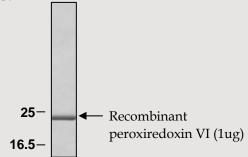
Molecular Weight: 26.1 kDa

Packaging size: 0.5 mg

Concentration: 1 mg/ml

**Storage :** Peroxiredoxin VI is supplied with a vial of storage buffer (20mM HEPES , pH 7.0 / 1mM EDTA / 10% Glycerol). Store at -

80°C.



## **Background Reference:**

1) Wood, Z. A. et al. (2003) Trends Biochem Sci. 28(1):32-40.

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