Human Recombinant PRDX 5

CATALOG #: 6321-100 100 µg

ALTERNATE NAMES: Peroxiredoxin 5, ACR1, AOEB116, B116, PLP, PMP20, PRDX6, PRXV, SBBI10.

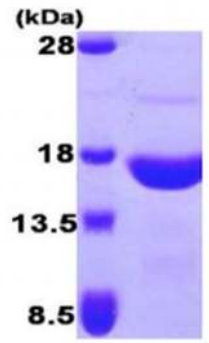
SOURCE: E.Coli

PURITY: > 95% by SDS - PAGE

MOL. WEIGHT: 17 kDa (162 aa – 53-214 aa).

ENDOTOXIN: < 1.0 EU per 1 µg of protein (determined by LAL method)

FORMULATION: 1 mg/ml solution in 20 mM HEPES buffer (pH 7.4).



15% SDS-PAGE (3ug)

Human Recombinant PRDX 5

STORAGE CONDITIONS:
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.

DESCRIPTION:
Peroxiredoxin-5, mitochondrial in humans is encoded by the PRDX5 gene. This gene encodes a member of the peroxiredoxin family of antioxidant enzymes, which reduce hydrogen peroxide and alkyl hydroperoxides. The encoded protein may play an antioxidant protective role in different tissues under normal conditions and during inflammatory processes. It interacts with peroxisome receptor 1. In human cells, it has been shown that PRDX5 can be addressed to mitochondria, peroxisomes, the cytosol, and the nucleus.

AMINO ACID SEQUENCE:
MAPIKVGDAI PAVEVFEGEP GNKVNLAELF KGKKGVLFGV PGAFTPGCSK THLPGFVEQA EALKAKGVQV VACLSVNDAF VTGEWGRAHK AEGKVRLLAD PTGAFGKETD LLLDDSLVSI FGNRRLKRFS MVVQDGIVKA LNVEPDGTGL TCSLAPNIIS QL.

BIOLOGICAL ACTIVITY:
Specific activity: approximately 117-136 pmole/min/µg. 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 µg of enzyme can reduce at 25°C for 1 minute.

RELATED PRODUCTS:

- Human Recombinant PRDX 2 **(Cat. No. 6319-100)**
- Human Recombinant PRDX 3 **(Cat. No. 6320-100)**
- Human Recombinant PRDX 6 **(Cat. No. 6322-100)**
- Human Recombinant PRDX 1 **(Cat. No. 6323-100)**
- Human Recombinant PRDX 4 **(Cat. No. 6324-100)**
- Human Recombinant Thioredoxin 1 **(Cat. No. 6305-100)**
- Human Recombinant Thioredoxin 2 **(Cat. No. 6318-100)**

FOR RESEARCH USE ONLY! Not to be used in humans.