abcam

Product datasheet

Recombinant human Peroxiredoxin 1/PAG protein ab74172

2 References 1 Image

Description

Product name	Recombinant human Peroxiredoxin 1/PAG protein
Biological activity	Specific activity: approximately 600-670 pmole/min/µg. Enzymatic activity is defined as the amount of hydroperoxide that 1µg of enzyme can reduce at 25C for 1 minute. Conditions - Reaction buffer : 1mM DTT, 0.03X PBS, 0.5% glycerol. - Initial amount of substrate : 0.85µg - Total reaction volume: 100 µl. - Reaction temperature: Room temperature Specific activity: approximately 600-670 pmole/min/µg. Enzymatic activity was confirmed by measuring the remaining peroxide after incubation of PRDX1 and peroxide for 20 min at room temperature. Specific activity is defined as the amount of hydroperoxide that 1ug of enzyme can reduce at 25 C for 1 minute.
Purity	> 90 % SDS-PAGE. ab74172 is purified by conventional chromatography techniques.
Expression system	Escherichia coli
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Human
Sequence	MSSGNAKIGH PAPNFKATAV MPDGQFKDIS LSDYKGKYVV FFFYPLDFTF VCPTEIIAFS DRAEEFKKLN CQVIGASVDS HFCHLAWVNT PKKQGGLGPM NIPLVSDPKR TIAQDYGVLK ADEGISFRGL FIIDDKGILR QITVNDLPVG RSVDETLRLV QAFQFTDKHG EVCPAGWKPG SDTIKPDVQK SKEYFSKQK
Tags	His tag N-Terminus

Specifications

Our **Abpromise guarantee** covers the use of **ab74172** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	Functional Studies
	SDS-PAGE

Form	Liquid

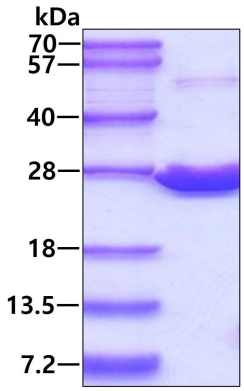
Preparation and Storage

Stability and Storage	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles. pH: 7.50 Constituents: 0.242% Tris, 20% Glycerol (glycerin, glycerine) This product is an active protein and may elicit a biological response in vivo, handle with caution.

General Info

Function	Involved in redox regulation of the cell. Reduces peroxides with reducing equivalents provided through the thioredoxin system but not from glutaredoxin. May play an important role in eliminating peroxides generated during metabolism. Might participate in the signaling cascades of growth factors and tumor necrosis factor-alpha by regulating the intracellular concentrations of H(2)O(2). Reduces an intramolecular disulfide bond in GDPD5 that gates the ability to GDPD5 to drive postmitotic motor neuron differentiation.
Sequence similarities	Belongs to the ahpC/TSA family. Contains 1 thioredoxin domain.
Post-translational modifications	Phosphorylated on Thr-90 during the M-phase, which leads to a more than 80% decrease in enzymatic activity.
Cellular localization	Cytoplasm. Melanosome. Identified by mass spectrometry in melanosome fractions from stage I to stage IV.

Images



SDS-PAGE - Recombinant human Peroxiredoxin 1/PAG protein (ab74172)

ab74172, detecting Peroxiredoxin 1/PAG protein (His tag) at 24 kDa by SDS-PAGE. 3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit **https://www.abcam.com/abpromise** or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors