

Product datasheet

Recombinant human Peroxiredoxin 1/PAG protein ab167989

[1 References](#) [1 Image](#)

Description

Product name	Recombinant human Peroxiredoxin 1/PAG protein	
Biological activity	Specific activity: approximately 600-670 pmole/min/μg. Enzymatic activity was confirmed by measuring the remaining peroxide after incubation of Peroxiredoxin 1 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.	
Purity	> 90 % SDS-PAGE.	
Expression system	Escherichia coli	
Accession	Q06830	
Protein length	Full length protein	
Animal free	No	
Nature	Recombinant	
Species	Human	
Sequence	MGSSHHHHHH SGLVPRGSH MSSGNAKIGH PAPNFKATAV MPDGQFKDIS LSDYKGKYVV FFFYPLDFTF VCPTEIAFS DRAEEFKKLN CQVIGASVDS HFCHLAWVNT PKKQGGLGPM NIPLVSDPKR TIAQDYGVLK ADEGISFRGL FIIDDKGILR QITVNDLPVG RSVDETLRLV QAFQFTDKHG EVCPAGWKPG SDTIKPDVQK SKEYFSKQK	
Predicted molecular weight	24 kDa including tags	
Amino acids	1 to 199	
Tags	His tag N-Terminus	

Specifications

Our [Abpromise guarantee](#) covers the use of **ab167989** in the following tested applications.

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

Applications	SDS-PAGE
	Functional Studies

Form	Liquid
Additional notes	This product is manufactured by BioVision, an Abcam company and was previously called 6323 Human Recombinant PRDX 1. 6323-100 is the same size as the 100 µg size of ab167989.

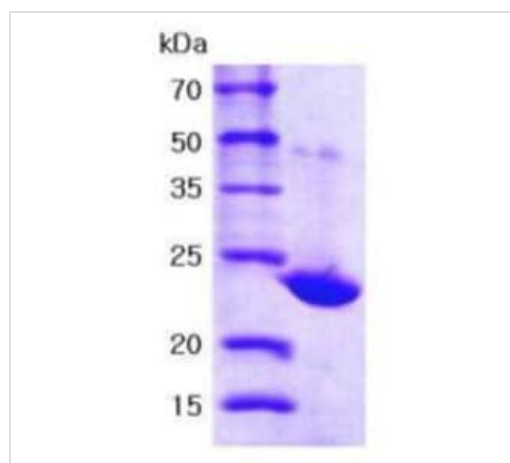
Preparation and Storage

Stability and Storage	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle. pH: 7.50 Constituents: 79% Tris HCl, 20% Glycerol (glycerin, glycerine) This product is an active protein and may elicit a biological response in vivo, handle with caution.
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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



15% SDS-PAGE analysis of ab167989 (3 µg).

SDS-PAGE - Recombinant human Peroxiredoxin
1/PAG protein (ab167989)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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