

Human/Mouse/Rat Peroxiredoxin 6 Alexa Fluor® 488-conjugated Antibody

Antigen Affinity-purified Polyclonal Goat IgG Catalog Number: AF3490G 100 µg

DESCRIPTION		
Species Reactivity	Human/Mouse/Rat	
Specificity	Detects endogenous human, mouse, and rat Peroxiredoxin 6 on in Western blots. In Western blots, this antibody does not cross-react with recombinant human Peroxiredoxin 1, 2, 3, or 5.	
Source	Polyclonal Goat IgG	
Purification	Antigen Affinity-purified	
Immunogen	E. coli-derived recombinant human Peroxiredoxin 6 Met1-Pro224 Accession # P30041	
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm	
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide	
	*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.	

APPLICATIONS		
Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.		
Knockout Validated	Optimal dilution of this antibody should be experimentally determined.	
Western Blot	Optimal dilution of this antibody should be experimentally determined.	

PREPARATION AND STORAGE		
Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.	
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied	

BACKGROUND

Human peroxiredoxin-6 (Prx-6) is a 26 kDa, cytosolic antioxidant enzyme that belongs to the *1-Cys* class of the THP/ahpC family of proteins. The molecule is 224 amino acids (aa) in length and has but one catalytic cysteine at Cys46. Following an attack on peroxide, Cys46 is oxidized to cysteine sulfenic acid and exists in a stable conformation. Reduced, Prx-6 is a homotetramer. When activated, it apparently forms a covalently-associated homodimer. In addition to glutathione peroxidase activity, Prx-6 is also reported to demonstrate phospholipase A₂ activity. Thus, Prx-6 likely plays a role in phospholipid turnover. The enzyme effect is a function of Ser32 in a GWSWG motif. Human Prx-6 is 93%, 92%, 90%, and 94% aa identical to porcine, rat, mouse, and canine Prx-6, respectively.

PRODUCT SPECIFIC NOTICES

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Rev. 9/13/2025 Page 1 of 1

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