

## DESCRIPTION

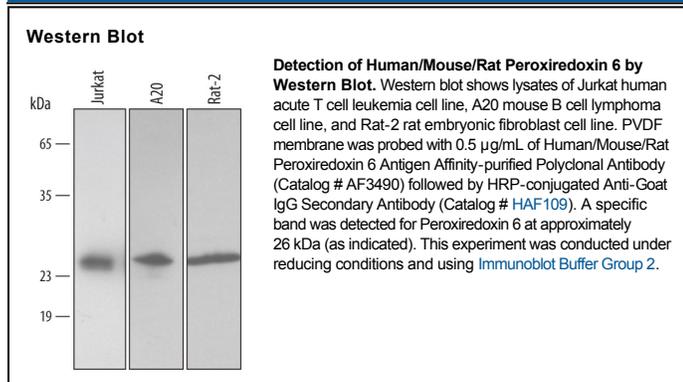
<b>Species Reactivity</b>	Human/Mouse/Rat
<b>Specificity</b>	Detects endogenous human, mouse, and rat Peroxiredoxin 6 on in Western blots. In Western blots, this antibody does not cross-react with recombinant human Peroxiredoxin 1, 2, 3, or 5.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human Peroxiredoxin 6 Met1-Pro224 Accession # P30041
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

## 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.

	Recommended Concentration	Sample
<b>Western Blot</b>	0.5 µg/mL	See Below

## DATA



## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.2 mg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>• 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## 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 A<sub>2</sub> 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.