Human/Mouse/Rat Peroxiredoxin 4 Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: AF5460

DESCRIPTION

Species Reactivity	Human/Mouse/Rat
Specificity	Detects endogenous human, mouse and rat Peroxiredoxin 4 in Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	*E. coli*-derived recombinant human Peroxiredoxin 4 Met1-Asn271 Accession # Q13162
Formulation	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.

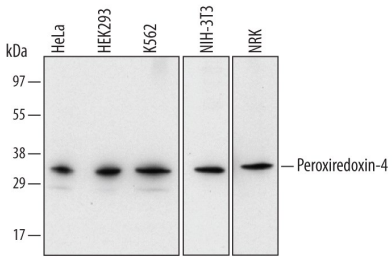
APPLICATIONS

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
Western Blot	1 µg/mL	See Below

DATA

Western Blot



Detection of Human/Mouse/Rat Peroxiredoxin 4 by Western Blot. Western blot shows lysates of HeLa human cervical epithelial carcinoma cell line, HEK293 human embryonic kidney cell line, K562 human chronic myelogenous leukemia cell line, NIH-3T3 mouse embryonic fibroblast cell line, and NRK rat normal kidney cell line. PVDF membrane was probed with 1 µg/mL of Human/Mouse/Rat Peroxiredoxin 4 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5460) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF109). A specific band was detected for Peroxiredoxin 4 at approximately 32 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 2.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	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
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Peroxiredoxin 4 (Prx-IV; also known as PRDX4 and thioredoxin peroxidase AOE372) is a 30-32 kDa, widely expressed cytoplasmic antioxidant enzyme that belongs to the *typical 2-Cys* class of the TSA/ahpC family of peroxiredoxins. It exists as either a homodimer, or heterodimer with PRDX1. PRDX4 reportedly counteracts p53-mediated generation of ROS, and regulates NFκB via IκB-α. Human PRDX4 is 271 amino acids (aa) in length and contains an N-terminal poly-Leu region (aa 20-30) and a 159 thioredoxin domain (aa 79-237). There is one catalytic cysteine at Cys124. Over amino acids 1-271, human PRDX4 shares 89% aa identity with mouse and rat PRDX4.