

# PXDN (P-12): sc-168598

## BACKGROUND

PXDN (peroxidasin homolog), also known as PXN, VPO (vascular peroxidase 1), PRG2 (p53-responsive gene 2 protein) or MG50 (melanoma-associated gene 50), is a 1,479 amino acid secreted protein that is highly expressed in heart, lung, ovary, spleen, intestine and placenta, and lowly expressed in liver, colon, pancreas, kidney, thymus, skeletal muscle and prostate. Belonging to the peroxidase family and the XPO subfamily, PXDN is suggested to participate in extracellular matrix formation. PXDN consists of four Ig-like C<sub>2</sub>-type (immunoglobulin-like) domains, four LRR (leucine-rich repeats), one LRRCT domain, one LRRNT domain and a VWFC domain. PXDN may exist as two alternatively isoforms and as a homotrimer with a unique hybrid structure that combines an enzymatically functional peroxidase domain with motifs that are typically found in extracellular matrix-associated proteins.

## REFERENCES

- Weiler, S.R., et al. 1994. Assignment of a human melanoma associated gene PXDN (D2S448) to chromosome 2p25.3 by fluorescence *in situ* hybridization. *Genomics* 22: 243-244.
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- Horikoshi, N., et al. 1999. Isolation of differentially expressed cDNAs from p53-dependent apoptotic cells: activation of the human homologue of the *Drosophila* peroxidasin gene. *Biochem. Biophys. Res. Commun.* 261: 864-869.
- Mitchell, M.S., et al. 2000. A novel melanoma gene (PXDN) encoding the interleukin 1 receptor antagonist and six epitopes recognized by human cytolytic T lymphocytes. *Cancer Res.* 60: 6448-6456.
- Online Mendelian Inheritance in Man, OMIM<sup>™</sup>. 2000. Johns Hopkins University, Baltimore, MD. MIM Number: 605158. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
- Cheng, G., et al. 2008. Identification and characterization of VPO1, a new animal heme-containing peroxidase. *Free Radic. Biol. Med.* 45: 1682-1694.
- Péterfi, Z., et al. 2009. Peroxidasin is secreted and incorporated into the extracellular matrix of myfibroblasts and fibrotic kidney. *Am. J. Pathol.* 175: 725-735.

## CHROMOSOMAL LOCATION

Genetic locus: PXDN (human) mapping to 2p25.3; Pxdn (mouse) mapping to 12 A2.

## SOURCE

PXDN (P-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of PXDN of human origin.

## STORAGE

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-168598 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

PXDN (P-12) is recommended for detection of PXDN of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

PXDN (P-12) is also recommended for detection of PXDN in additional species, including equine, bovine, porcine and avian.

Suitable for use as control antibody for PXDN siRNA (h): sc-270608, PXDN siRNA (m): sc-152601, PXDN shRNA Plasmid (h): sc-270608-SH, PXDN shRNA Plasmid (m): sc-152601-SH, PXDN shRNA (h) Lentiviral Particles: sc-270608-V and PXDN shRNA (m) Lentiviral Particles: sc-152601-V.

Molecular Weight of PXDN: 165 kDa.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz<sup>™</sup> Mounting Medium: sc-24941.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.



Try **PXDN (2C11): sc-293408**, our highly recommended monoclonal alternative to PXDN (P-12).