

# MPND (E-15): sc-138997

## BACKGROUND

Proteases are enzymes that are involved in protein catabolism by hydrolyzing the peptide bonds between amino acids in a polypeptide chain. MPND (MPN domain-containing protein) is a 471 amino acid protein that is thought to be a protease. Expressed as two isoforms produced by alternative splicing, MPND contains a JAMM motif and one MPN domain. The gene that encodes MPND maps to human chromosome 19, which consists of around 63 million bases with over 1,400 genes, making up over 2% of human genomic DNA. Chromosome 19 includes a diversity of interesting genes and is recognized for having the greatest gene density of the human chromosomes. It is the genetic home for a number of immunoglobulin superfamily members including the killer cell and leukocyte Ig-like receptors, a number of ICAMs, the CEACAM and PSG family and Fc $\alpha$  receptors. Key genes for eye color and hair color also map to chromosome 19.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: MPND (human) mapping to 19p13.3; Mpdn (mouse) mapping to 17 D.

## SOURCE

MPND (E-15) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of MPND of human origin.

## PRODUCT

Each vial contains 100  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-138997 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

MPND (E-15) is recommended for detection of MPND of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

MPND (E-15) is also recommended for detection of MPND in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for MPND siRNA (h): sc-97324, MPND siRNA (m): sc-149532, MPND shRNA Plasmid (h): sc-97324-SH, MPND shRNA Plasmid (m): sc-149532-SH, MPND shRNA (h) Lentiviral Particles: sc-97324-V and MPND shRNA (m) Lentiviral Particles: sc-149532-V.

Molecular Weight of MPND: 50 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker<sup>™</sup> compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz<sup>™</sup> Mounting Medium: sc-24941.

## STORAGE

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

## 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.