

PREP (H-300): sc-98504

BACKGROUND

PREP (prolyl endopeptidase), also known as PE or PEP, is a 710 amino acid protein that localizes to the cytoplasm and belongs to the peptidase S9A family. Existing as a monomer, PREP functions as a prolyl endopeptidase that specifically cleaves peptide bonds on the C-terminal side of prolyl residues within proteins that are approximately 30 amino acids long. Via its catalytic activity, PREP is thought to be involved in the formation and degradation of neuropeptides and hormones, indicating involvement in signaling and regulatory pathways throughout the body. The gene encoding PREP maps to human chromosome 6, which contains 170 million base pairs and comprises nearly 6% of the human genome. Deletion of a portion of the q arm of chromosome 6 is associated with early onset intestinal cancer, suggesting the presence of a cancer susceptibility locus. Additionally, Porphyria cutanea tarda, Parkinson's disease, Stickler syndrome and a susceptibility to bipolar disorder are all associated with genes that map to chromosome 6.

REFERENCES

1. Wilk, S. 1983. Prolyl endopeptidase. *Life Sci.* 33: 2149-2157.
2. Shirasawa, Y., et al. 1994. Molecular cloning and characterization of prolyl endopeptidase from human T cells. *J. Biochem.* 115: 724-729.

CHROMOSOMAL LOCATION

Genetic locus: PREP (human) mapping to 6q21; Prep (mouse) mapping to 10 B2.

SOURCE

PREP (H-300) is a rabbit polyclonal antibody raised against amino acids 1-300 mapping at the N-terminus of PREP (Prolyl endopeptidase) of human origin.

PRODUCT

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

APPLICATIONS

PREP (H-300) is recommended for detection of PREP of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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).

PREP (H-300) is also recommended for detection of PREP in additional species, including bovine, porcine and avian.

Suitable for use as control antibody for PREP siRNA (h): sc-76244, PREP siRNA (m): sc-76245, PREP shRNA Plasmid (h): sc-76244-SH, PREP shRNA Plasmid (m): sc-76245-SH, PREP shRNA (h) Lentiviral Particles: sc-76244-V and PREP shRNA (m) Lentiviral Particles: sc-76245-V.

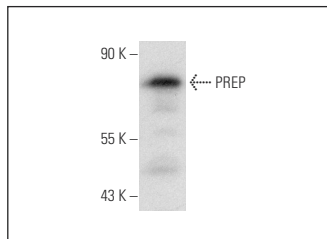
Molecular Weight of PREP: 80 kDa.

Positive Controls: A-431 nuclear extract: sc-2122.

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™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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™ Mounting Medium: sc-24941.

DATA



PREP (H-300): sc-98504. Western blot analysis of PREP expression in A-431 nuclear extract.

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 or our catalog for detailed protocols and support products.


 MONOS
Satisfaction
Guaranteed

Try **PREP (C-12): sc-365416**, our highly recommended monoclonal alternative to PREP (H-300).