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PREP (m): 293T Lysate: sc-122762

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., Osawa, T. and Hirashima, A. 1994. Molecular cloning and characterization of prolyl endopeptidase from human T cells. *J. Biochem.* 115: 724-729.
3. Valdivia, A., Irazusta, J., Fernández, D., Múgica, J., Ochoa, C. and Casis, L. 2004. Pyroglutamyl peptidase I and prolyl endopeptidase in human semen: increased activity in necrozoospermia. *Regul. Pept.* 122: 79-84.
4. Schulz, I., Zeitschel, U., Rudolph, T., Ruiz-Carrillo, D., Rahfeld, J.U., Gerhartz, B., Bigl, V., Demuth, H.U. and Rossner, S. 2005. Subcellular localization suggests novel functions for prolyl endopeptidase in protein secretion. *J. Neurochem.* 94: 970-979.
5. Bär, J.W., Rahfeld, J.U., Schulz, I., Gans, K., Ruiz-Carrillo, D., Manhart, S., Rosche, F. and Demuth, H.U. 2006. Prolyl endopeptidase cleaves the apoptosis rescue peptide humanin and exhibits an unknown post-cysteine cleavage specificity. *Adv. Exp. Med. Biol.* 575: 103-108.
6. Mamdani, F., Sequeira, A., Alda, M., Grof, P., Rouleau, G. and Turecki, G. 2007. No association between the PREP gene and lithium responsive bipolar disorder. *BMC Psychiatry.* 7: 9.
7. Myöhänen, T.T., Venäläinen, J.I., Tupala, E., Garcia-Horsman, J.A., Miettinen, R. and Männistö, P.T. 2007. Distribution of immunoreactive prolyl oligopeptidase in human and rat brain. *Neurochem. Res.* 32: 1365-1374.
8. Garcia-Horsman, J.A., Venäläinen, J.I., Lohi, O., Auriola, I.S., Korponay-Szabo, I.R., Kaukinen, K., Mäki, M. and Männistö, P.T. 2007. Deficient activity of mammalian prolyl oligopeptidase on the immunoactive peptide digestion in coeliac disease. *Scand. J. Gastroenterol.* 42: 562-571.
9. Online Mendelian Inheritance in Man, OMIM[™]. 2007. Johns Hopkins University, Baltimore, MD. MIM Number: 600400. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

CHROMOSOMAL LOCATION

Genetic locus: Prep (mouse) mapping to 10 B2.

PRODUCT

PREP (m): 293T Lysate represents a lysate of mouse PREP transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

PREP (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive PREP antibodies. Recommended use: 10-20 µl per lane.

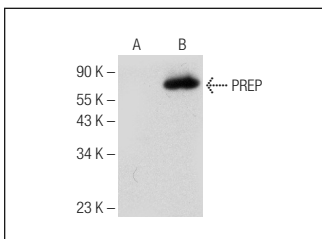
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

PREP (C-12): sc-365416 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse PREP expression in PREP transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker[™] Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



PREP (C-12): sc-365416. Western blot analysis of PREP expression in non-transfected: sc-117752 (A) and mouse PREP transfected: sc-122762 (B) 293T whole cell lysates.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.