

NPEPL1 (h): 293 Lysate: sc-113179

BACKGROUND

Amino peptidases are widely distributed in eukaryotes and prokaryotes. These enzymes catalyze the removal of amino acids from the N-termini of proteins or peptide substrates. Amino peptidases are involved in regulating hormone levels and are essential for digestive and intracellular protein metabolism. NPEPL1, also referred to as amino peptidase-like 1, is a 523 amino acid protein that belongs to the peptidase M17 family and is ubiquitously expressed. NPEPL1 may be involved in the processing, catabolism and degradation of intracellular proteins by catalyzing the removal of unsubstituted N-terminal amino acids from various peptides. NPEPL1 contains several zinc binding sites and is expressed as three isoforms due to alternative splicing events.

REFERENCES

1. Taylor, A. 1993. Amino peptidases: structure and function. *FASEB J.* 7: 290-298.
2. Taylor, A. 1993. Amino peptidases: towards a mechanism of action. *Trends Biochem. Sci.* 18: 167-171.
3. Meinel, T., Serero, A. and Giglione, C. 2006. Impact of the N-terminal amino acid on targeted protein degradation. *Biol. Chem.* 387: 839-851.
4. Herrera-Camacho, I., Rosas-Murrieta, N.H., Rojo-Domínguez, A., Millán, L., Reyes-Leyva, J., Santos-López, G. and Suárez-Rendueles, P. 2007. Biochemical characterization and structural prediction of a novel cytosolic leucyl amino peptidase of the M17 family from *Schizosaccharomyces pombe*. *FEBS J.* 274: 6228-6240.
5. Chen, S.L., Marino, T., Fang, W.H., Russo, N. and Himio, F. 2008. Peptide hydrolysis by the binuclear zinc enzyme amino peptidase from *Aeromonas proteolytica*: a density functional theory study. *J. Phys. Chem. B* 112: 2494-2500.
6. SWISS-PROT/TrEMBL (Q8NDH3). World Wide Web URL: <http://www.expasy.ch/sprot/sprot-top.html>.

CHROMOSOMAL LOCATION

Genetic locus: NPEPL1 (human) mapping to 20q13.32.

PRODUCT

NPEPL1 (h): 293 Lysate represents a lysate of human NPEPL1 transfected 293 cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

NPEPL1 (h): 293 Lysate is suitable as a Western Blotting positive control for human reactive NPEPL1 antibodies. Recommended use: 10-20 µl per lane.

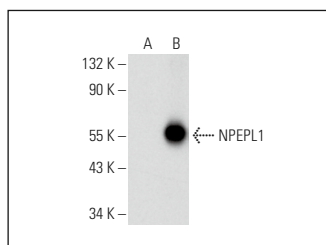
Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-transfected 293 cells.

NPEPL1 (E-10): sc-515463 is recommended as a positive control antibody for Western Blot analysis of enhanced human NPEPL1 expression in NPEPL1 transfected 293 cells (starting dilution 1:100, dilution range 1:100-1:1,000).

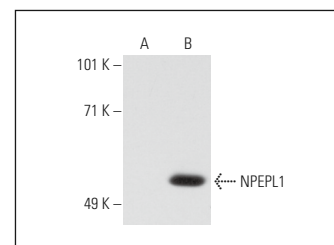
RECOMMENDED SUPPORT REAGENTS

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



NPEPL1 (E-10): sc-515463. Western blot analysis of NPEPL1 expression in non-transfected: sc-110760 (A) and human NPEPL1 transfected: sc-113179 (B) 293 whole cell lysates.



NPEPL1 (B-12): sc-100556. Western blot analysis of NPEPL1 expression in non-transfected: sc-110760 (A) and human NPEPL1 transfected: sc-113179 (B) 293 whole cell lysates.

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.

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.