

PNO1 (m): 293T Lysate: sc-125837

BACKGROUND

PNO1 (partner of NOB1), also known as KHRBP1, is a 252 amino acid protein that localizes to the nucleolus and contains one KH domain. Expressed in a variety of tissues, including kidney, lung, liver and spleen, with lower levels present in brain, heart, colon and skeletal muscle, PNO1 may play a role in RNA binding events during transcription or translation. The gene encoding PNO1 maps to human chromosome 2, which houses over 1,400 genes and comprises nearly 8% of the human genome. Harlequin ichthyosis, a rare and morbid skin deformity, is associated with mutations in the ABCA12 gene, while the lipid metabolic disorder sitosterolemia is associated with defects in the ABCG5 and ABCG8 genes. Additionally, an extremely rare recessive genetic disorder, Alström syndrome, is caused by mutations in the ALMS1 gene, which maps to chromosome 2.

REFERENCES

1. Ijdo, J.W., et al. 1991. Origin of human chromosome 2: an ancestral telomere-telomere fusion. *Proc. Natl. Acad. Sci. USA* 88: 9051-9055.
2. Zhou, G.J., et al. 2004. Cloning and characterization of a novel human RNA binding protein gene PNO1. *DNA Seq.* 15: 219-224.
3. Zhang, Y., et al. 2005. Cloning, expression and characterization of the human NOB1 gene. *Mol. Biol. Rep.* 32: 185-189.
4. Thomas, A.C., et al. 2006. ABCA12 is the major Harlequin ichthyosis gene. *J. Invest. Dermatol.* 126: 2408-2413.
5. Akiyama, M., et al. 2007. Compound heterozygous ABCA12 mutations including a novel nonsense mutation underlie Harlequin ichthyosis. *Dermatology* 215: 155-159.
6. Marshall, J.D., et al. 2007. Alström syndrome. *Eur. J. Hum. Genet.* 15: 1193-1202.
7. Marshall, J.D., et al. 2007. Spectrum of ALMS1 variants and evaluation of genotype-phenotype correlations in Alström syndrome. *Hum. Mutat.* 28: 1114-1123.

CHROMOSOMAL LOCATION

Genetic locus: Pno1 (mouse) mapping to 11 A2.

PRODUCT

PNO1 (m): 293T Lysate represents a lysate of mouse PNO1 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

PNO1 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive PNO1 antibodies. Recommended use: 10-20 µl per lane.

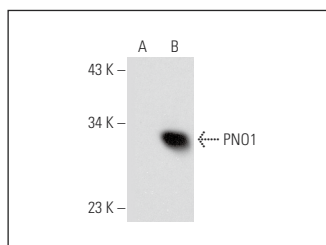
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

PNO1 (A-3): sc-514905 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse PNO1 expression in PNO1 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

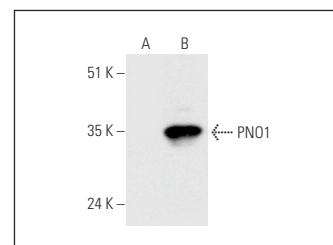
RECOMMENDED SUPPORT REAGENTS

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



PNO1 (A-3): sc-514905. Western blot analysis of PNO1 expression in non-transfected: sc-117752 (A) and mouse PNO1 transfected: sc-125837 (B) 293T whole cell lysates.



PNO1 (G-7): sc-514727. Western blot analysis of PNO1 expression in non-transfected: sc-117752 (A) and mouse PNO1 transfected: sc-125837 (B) 293T 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.