

# PRHOXNB (W-14): sc-243860

## BACKGROUND

PRHOXNB (parahox cluster neighbor), also known as URAD, putative 2-oxo-4-hydroxy-4-carboxy-5-ureidoimidazoline decarboxylase or OHCU decarboxylase, is a 173 amino acid protein that localizes to peroxisome and belongs to the OHCU decarboxylase family. Encoded by a gene that maps to human chromosome 13q12.2, PRHOXNB participates in lyase and carboxy-lyase activities. PRHOXNB catalyzes the stereoselective decarboxylation of 2-oxo-4-hydroxy-4-carboxy-5-ureidoimidazoline (OHCU) to (S)-allantoin. Highly conserved, PRHOXNB occurs in a single copy in innumerable organisms, although it is apparently not expressed. In primates, genes coding for enzymes linked to uric acid degradation were inactivated and converted to pseudogenes, suggesting that PRHOXNB could be the product of a pseudogene.

## REFERENCES

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3. Mulley, J.F., Chiu, C.H. and Holland, P.W. 2006. Breakup of a homeobox cluster after genome duplication in teleosts. *Proc. Natl. Acad. Sci. USA* 103: 10369-10372.
4. Xing, F., Tan, X., Zhang, P.J., Ma, J., Zhang, Y., Xu, P. and Xu, Y. 2007. Characterization of amphioxus GDF8/11 gene, an archetype of vertebrate MSTN and GDF11. *Dev. Genes Evol.* 217: 549-554.
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6. Xu, C., Zhang, L., Chen, N., Su, B., Pan, C.M., Li, J.Y., Zhang, G.W., Liu, Z., Sheng, Y. and Song, H.D. 2010. A new locus for hereditary hypotrichosis simplex maps to chromosome 13q12.12 approximately 12.3 in a Chinese family. *J. Cutan. Pathol.* 37: 758-763.

## CHROMOSOMAL LOCATION

Genetic locus: PRHOXNB (human) mapping to 13q12.2; Prhoxnb (mouse) mapping to 5 G3.

## SOURCE

PRHOXNB (W-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of PRHOXNB of human origin.

## STORAGE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.

## PRODUCT

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

Blocking peptide available for competition studies, sc-243860 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

PRHOXNB (W-14) is recommended for detection of PRHOXNB of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

PRHOXNB (W-14) is also recommended for detection of PRHOXNB in additional species, including canine and porcine.

Suitable for use as control antibody for PRHOXNB siRNA (m): sc-152463, PRHOXNB shRNA Plasmid (m): sc-152463-SH and PRHOXNB shRNA (m) Lentiviral Particles: sc-152463-V.

Molecular Weight of PRHOXNB: 19 kDa.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## RESEARCH USE

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