

# Nidogen-2 (N-20): sc-26132

## BACKGROUND

Nidogens are highly conserved proteins present in vertebrate and invertebrate basement membranes. Nidogens connect the Laminin and Collagen IV networks and integrate other proteins into the membrane. In mammals, two Nidogen proteins, Nidogen and Nidogen-2, interact at comparable levels with Collagen I, IV and Perlecan, serving to stabilize basement membranes and playing a major role in embryogenesis. The two isoforms have a similar shape, consisting of three globular domains, and co-localize in vessel walls and other basement membrane zones. Nidogen-2 is a cell adhesion protein glycosylated at nitrogen and oxygen sites, and is widely distributed in basement membranes in heart, placenta, bone and, to a lesser extent, in pancreas, kidney and skeletal muscle.

## REFERENCES

1. Kohfeldt, E., Sasaki, T., Gohring, W. and Timpl, R. 1998. Nidogen-2: a new basement membrane protein with diverse binding properties. *J. Mol. Biol.* 282: 99-109.
2. Miosge, N., Holzhausen, S., Zelent, C., Sprysch, P. and Herken, R. 2001. Nidogen and Nidogen-2 are found in basement membranes during human embryonic development. *Histochem. J.* 33: 523-530.
3. Schymeinsky, J., Nedbal, S., Miosge, N., Poschl, E., Rao, C., Beier, D.R., Skarnes, W.C., Timpl, R. and Bader, B.L. 2002. Gene structure and functional analysis of the mouse Nidogen-2 gene: Nidogen-2 is not essential for basement membrane formation in mice. *Mol. Cell. Biol.* 22: 6820-6830.
4. Salmivirta, K., Talts, J.F., Olsson, M., Sasaki, T., Timpli, R. and Ekblom, P. 2002. Binding of mouse Nidogen-2 to basement membrane components and cells and its expression in embryonic and adult tissues suggest complementary functions of the two Nidogens. *Exp. Cell Res.* 279: 188-201.
5. SWISS-PROT/TrEMBL (Q14112). World Wide Web URL: <http://www.expasy.ch/sprot/sprot-top.html>

## CHROMOSOMAL LOCATION

Genetic locus: NID2 (human) mapping to 14q22; Nid2 (mouse) mapping to 14 A2.

## SOURCE

Nidogen-2 (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of Nidogen-2 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.

Blocking peptide available for competition studies, sc-26132 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

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

## APPLICATIONS

Nidogen-2 (N-20) is recommended for detection of Nidogen-2 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).

Suitable for use as control antibody for Nidogen-2 siRNA (h): sc-43178, Nidogen-2 siRNA (m): sc-43179, Nidogen-2 shRNA Plasmid (h): sc-43178-SH, Nidogen-2 shRNA Plasmid (m): sc-43179-SH, Nidogen-2 shRNA (h) Lentiviral Particles: sc-43178-V and Nidogen-2 shRNA (m) Lentiviral Particles: sc-43179-V.

Molecular Weight of Nidogen-2: 200 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.

## PROTOCOLS

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


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Try **Nidogen-2 (A-7): sc-373859** or **Nidogen-2 (F-2): sc-377424**, our highly recommended monoclonal alternatives to Nidogen-2 (N-20).