

# NOD9 (D-14): sc-131636

## BACKGROUND

The leucine-rich (LRR) repeat is a 20-30 amino acid motif that forms a hydrophobic  $\alpha/\beta$  horseshoe fold, allowing it to accommodate several leucine residues within a tightly packed core. All LRR repeats contain a variable segment and a highly conserved segment, the latter of which accounts for 11 or 12 residues of the entire LRR motif. NOD9, also known as NLRX1, NOD26 or NOD5, is a 975 amino acid outer mitochondrial membrane protein that contains one NACHT domain and 4 LRR repeats. Expressed at high levels in heart, muscle and mammary gland, NOD9 plays a role in antiviral signaling, specifically via inhibition of virus-induced helicases, thereby acting as a negative regulator of antiviral responses. Two isoforms of NOD9 exist due to alternative splicing events.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: NLRX1 (human) mapping to 11q23.3; Nlr1 (mouse) mapping to 9 A5.2.

## SOURCE

NOD9 (D-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of NOD9 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-131636 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

NOD9 (D-14) is recommended for detection of NOD9 isoforms 1 and 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); non cross-reactive with family member NOD3.

NOD9 (D-14) is also recommended for detection of NOD9 isoforms 1 and 2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for NOD9 siRNA (h): sc-96800, NOD9 siRNA (m): sc-150019, NOD9 shRNA Plasmid (h): sc-96800-SH, NOD9 shRNA Plasmid (m): sc-150019-SH, NOD9 shRNA (h) Lentiviral Particles: sc-96800-V and NOD9 shRNA (m) Lentiviral Particles: sc-150019-V.

Molecular Weight of NOD9: 108 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<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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<sup>™</sup> Mounting Medium: sc-24941.

## STORAGE

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. 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](http://www.scbt.com) or our catalog for detailed protocols and support products.


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Try **NOD9 (F-2): sc-374514**, our highly recommended monoclonal alternative to NOD9 (D-14).