

NOD1 (E-14): sc-22045

BACKGROUND

The mammalian homologs of the Ced-4 proteins, Apaf-1 (Ced-4), NOD1 (CARD4) and NOD2 contain a caspase recruitment domain (CARD) and a putative nucleotide binding domain, signified by a consensus Walker's A box (P-loop) and B box (Mg²⁺-binding site). NOD1 contains a putative regulatory domain and multiple leucine-rich repeats. NOD1 is a member of a growing family of intracellular proteins which share structural homology to the apoptosis regulator Apaf-1. NOD1 associates with the CARD-containing kinase RICK and activates NFκB. The self-association of NOD1 mediates proximity of RICK and the interaction of RICK with IKKγ. In addition, NOD1 binds to multiple caspases with long prodomains, but specifically activates caspase-9 and promotes caspase-9-induced apoptosis. NOD2 is composed of two N-terminal CARDs, a nucleotide-binding domain and multiple C-terminal leucine-rich repeats. The expression of NOD2 is highly restricted to monocytes, and activates NFκB in response to bacterial lipopolysaccharides.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: NOD1 (human) mapping to 7p14.3; Nod1 (mouse) mapping to 6 B3.

SOURCE

NOD1 (E-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of NOD1 of human origin.

RESEARCH USE

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

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-22045 P, (100 μg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

NOD1 (E-14) is recommended for detection of NOD1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μg per 100-500 μg of total protein (1 ml of cell lysate)], 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).

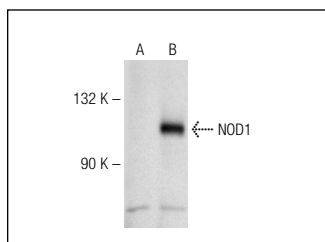
NOD1 (E-14) is also recommended for detection of NOD1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for NOD1 siRNA (h): sc-37279, NOD1 siRNA (m): sc-37280, NOD1 shRNA Plasmid (h): sc-37279-SH, NOD1 shRNA Plasmid (m): sc-37280-SH, NOD1 shRNA (h) Lentiviral Particles: sc-37279-V and NOD1 shRNA (m) Lentiviral Particles: sc-37280-V.

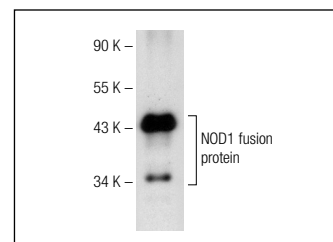
Molecular Weight of NOD1: 108 kDa.

Positive Controls: Nod1 (h): 293T Lysate: sc-113586.

DATA



NOD1 (E-14): sc-22045. Western blot analysis of Nod1 expression in non-transfected: sc-117752 (A) and human Nod1 transfected: sc-113586 (B) 293T whole cell lysates.



NOD1 (E-14): sc-22045. Western blot analysis of human recombinant NOD1 fusion protein.

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 or our catalog for detailed protocols and support products.



Try **NOD1 (B-4): sc-398696** or **NOD1 (C-9): sc-377111**, our highly recommended monoclonal alternatives to NOD1 (E-14).