**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 lipopoly-saccharides.

**CHROMOSOMAL LOCATION**

Genetic locus: NOD2 (human) mapping to 16q12.1; Nod2 (mouse) mapping to 8 C3.

**SOURCE**

NOD2 (2D9) is a mouse monoclonal antibody raised against amino acids 28-301 of NOD2 of human origin.

**PRODUCT**

Each vial contains 200 µg IgGκ, kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

NOD2 (2D9) is available conjugated to agarose (sc-56168 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-56168 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-56168 PE), fluorescein (sc-56168 FITC), Alexa Fluor® 488 (sc-56168 AF488), Alexa Fluor® 546 (sc-56168 AF546), Alexa Fluor® 594 (sc-56168 AF594) or Alexa Fluor® 647 (sc-56168 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FC; and to either Alexa Fluor® 680 (sc-56168 AF680) or Alexa Fluor® 790 (sc-56168 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FC.

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**APPLICATIONS**

NOD2 (2D9) is recommended for detection of NOD2 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 immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for NOD2 siRNA (h): sc-43973, NOD2 siRNA (m): sc-44983, NOD2 shRNA Plasmid (h): sc-43973-SH, NOD2 shRNA Plasmid (m): sc-44983-SH, NOD2 shRNA (h) Lentiviral Particles: sc-43973-V and NOD2 shRNA (m) Lentiviral Particles: sc-44983-V.

Molecular Weight of NOD2: 115 kDa.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended:


**SELECT PRODUCT CITATIONS**


**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.