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Datasheet for 200-401-DC8

# NOD2 Antibody

## Overview

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| **Description:** | Anti-NOD2 (RABBIT) Antibody - 200-401-DC8 |
| **Item No.:** | 200-401-DC8 |
| **Size:** | 100 µg |
| **Applications:** | ELISA, IF, IHC, WB |
| **Reactivity:** | Human |
| **Host Species:** | Rabbit |

## Product Details

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| **Background:** | Apaf-1 and NOD1 are members of a new family, which are involved in the regulation of apoptosis and immune response. Each of them contains a caspase recruitment domain (CARD) and a nucleotide-binding oligomerization domain (NOD). A third member in this family was recently identified and designated NOD2. NOD2 interacts with RICK via a homophilic CARD-CARD interaction. NOD2 activates NF-kB, which is regulated by its carboxy-terminal leucine-rich repeat domain that acts as an intracellular receptor for components of bacteria. The variants of NOD2, either a frameshift or a missense, were associated with Crohn's disease that is a main type of chronic inflammatory bowel disease. |
| **Synonyms:** | NOD2 Antibody, CD, ACUG, BLAU, IBD1, NLRC2, NOD2B, CARD15, CLR16.3, PSORAS1, Nucleotide-binding oligomerization domain-containing protein 2, Caspase recruitment domain-containing protein 15 |
| **Host Species:** | Rabbit |
| **Clonality:** | Polyclonal |
| **Format:** | IgG |

## Target Details

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| **Gene Name:** | NOD2 |
| **Reactivity:** | Human |
| **Immunogen Type:** | Conjugated Peptide |

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| **Immunogen:** | Anti-Rabbit NOD2 polyclonal antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to 16 amino acids at the N-terminus of human NOD2. |
| **Purity/Specificity:** | Anti-NOD2 Antibody was Protein A purified from monospecific antiserum by immunoaffinity purification. NOD2 has no cross-reaction with NOD1. |
| **Relevant Links:** | • UniProtKB - Q9HC29<br>• GeneID - 64127<br>• NCBI - NP_001280486.1<br>• 200-401-DC8 SDS |

## Application Details

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| **Tested Applications:** | ELISA, IF, IHC, WB |
| **Application Note:** | Anti-NOD2 Antibody has been tested for use in ELISA, Western Blotting, Immunohistochemistry, and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 115 kDa in Western Blots of specific cell lysates and tissues. |
| **Assay Dilutions:** | All assays should be optimized by the user. Recommended dilutions (if any) may be listed below. |
| **ELISA:** | 1:10,000-1:40,000 |
| **IF:** | 10 µg/mL |
| **IHC:** | 5 µg/mL |
| **WB:** | 1 to 4 µg/mL |

## Formulation

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| **Physical State:** | Liquid (sterile filtered) |
| **Concentration:** | 1 mg/mL by UV absorbance at 280 nm |
| **Buffer:** | 0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2 |
| **Preservative:** | 0.02% (w/v) Sodium Azide |
| **Stabilizer:** | None |

## Shipping & Handling

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| **Shipping Condition:** | Dry Ice |

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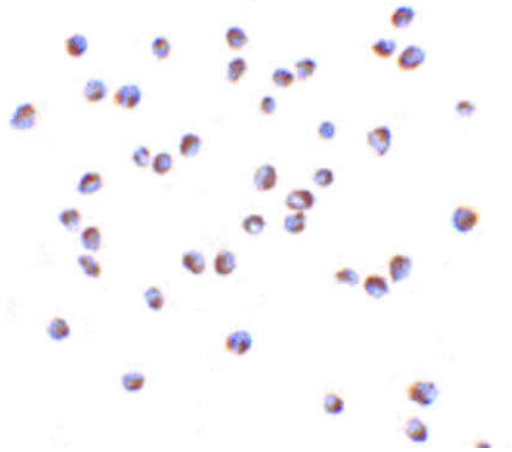
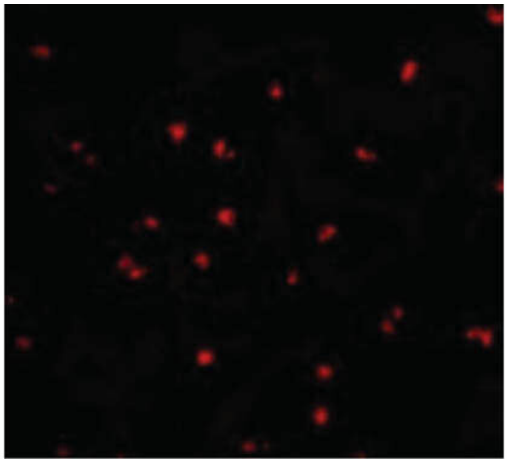
| **Storage Condition:** | Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use. |
| **Expiration:** | Expiration date is one (1) year from date of receipt. |

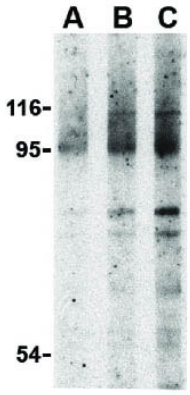
## Images



**Immunocytochemistry**
Immunocytochemistry of NOD2 antibody. Cells: Jurkat cells. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: NOD2 antibody at 5 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: NOD2 is cytoplasmic and is localized in the cell membrane and basolateral membrane. Staining: NOD2 as precipitated brown signal with hematoxylin blue nuclear counterstain.



**Immunofluorescence Microscopy**
Immunofluorescence Microscopy of NOD2 antibody. Tissue: Jurkat cels. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: NOD2 antibody at 20 µg/mL for 1 h at RT. Secondary antibody: Fluorescein rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: NOD2 is cytoplasmic and is also localized in the cell membrane and the basolateral cell membrane. Staining: NOD2 as red fluorescent signal.




**Western Blot**

Western Blot of NOD2 antibody. Lane 1: Jurkat cell lysate with NOD2 at 1 µg/mL. Lane 2: Jurkat cell lysate with NOD2 at 2 µg/mL. Lane 3: Jurkat cell lysate with NOD2 at 4 µg/mL. Load: 35 µg per lane. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 115.3 kDa, 95 kDa for NOD2. Other band(s): NOD2 splice variants and isoforms.

## Disclaimer