# ARG59175
# anti-NOD1 / CARD4 antibody

Package: 100 µl
Store at: -20°C

## Summary

| | |
|---|---|
| Product Description | Rabbit Polyclonal antibody recognizes NOD1 / CARD4 |
| Tested Reactivity | Hu, Ms |
| Tested Application | WB |
| Host | Rabbit |
| Clonality | Polyclonal |
| Isotype | IgG |
| Target Name | NOD1 / CARD4 |
| Species | Human |
| Immunogen | KLH-conjugated synthetic peptide corresponding to aa. 923-951 of Human NOD1. |
| Conjugation | Un-conjugated |
| Alternate Names | CLR7.1; Nucleotide-binding oligomerization domain-containing protein 1; Caspase recruitment domain-containing protein 4; NLRC1; CARD4 |

## Application Instructions

Application table

| Application | Dilution |
|---|---|
| WB | 1:1000 |

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Positive Control: Mouse spleen

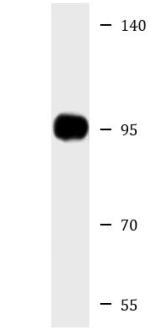
## Properties

| | |
|---|---|
| Form | Liquid |
| Purification | Purification with Protein A and immunogen peptide. |
| Buffer | PBS and 0.09% (W/V) Sodium azide. |
| Preservative | 0.09% (W/V) Sodium azide. |
| Storage instruction | For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use. |
| Note | For laboratory research only, not for drug, diagnostic or other use. |

## Bioinformation

| | |
|---|---|
| Gene Symbol | NOD1 |
| Gene Full Name | nucleotide-binding oligomerization domain containing 1 |
| Background | This gene encodes a member of the NOD (nucleotide-binding oligomerization domain) family. This member is a cytosolic protein. It contains an N-terminal caspase recruitment domain (CARD), a centrally located nucleotide-binding domain (NBD), and 10 tandem leucine-rich repeats (LRRs) in its C terminus. The CARD is involved in apoptotic signaling, LRRs participate in protein-protein interactions, and mutations in the NBD may affect the process of oligomerization and subsequent function of the LRR domain. This protein is an intracellular pattern-recognition receptor (PRR) that initiates inflammation in response to a subset of bacteria through the detection of bacterial diaminopimelic acid. Multiple alternatively spliced transcript variants differring in the 5' UTR have been described, but the full-length nature of these variants has not been determined. [provided by RefSeq, Oct 2009] |
| Function | Enhances caspase-9-mediated apoptosis. Induces NF-kappa-B activity via RIPK2 and IKK-gamma. Confers responsiveness to intracellular bacterial lipopolysaccharides (LPS). Forms an intracellular sensing system along with ARHGEF2 for the detection of microbial effectors during cell invasion by pathogens. Required for RHOA and RIPK2 dependent NF-kappa-B signaling pathway activation upon S.flexneri cell invasion. Involved not only in sensing peptidoglycan (PGN)-derived muropeptides but also in the activation of NF-kappa-B by Shigella effector proteins IpgB2 and OspB. Recruits NLRP10 to the cell membrane following bacterial infection. [UniProt] |
| Calculated Mw | 108 kDa |
| PTM | Ubiquitinated. 'Lys-48'-linked polyubiquitination by RNF34 promotes proteasomal degradation and thereby negatively regulates NOD1 for instance in NF-kappa-B activition. [UniProt] |
| Cellular Localization | Cytoplasm. Cell membrane. Apical cell membrane. Basolateral cell membrane. Note=Detected in the cytoplasm and at the cell membrane. Following bacterial infection, localizes to bacterial entry sites in the cell membrane. Recruited to the basolateral and apical membranes in polarized epithelial cells. [UniProt] |

## Images




ARG59175 anti-NOD1 / CARD4 antibody WB image

Western blot: 20 µg of Mouse spleen lysate stained with ARG59175 anti-NOD1 / CARD4 antibody at 1:1000 dilution.