

ARG59215 anti-NOD1 / CARD4 antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes NOD1 / CARD4
Tested Reactivity	Hu
Predict Reactivity	Ms, Rat
Tested Application	ICC/IF, IHC-P
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	NOD1 / CARD4
Species	Human
Immunogen	Recombinant protein corresponding to M1-M160 of Human NOD1 / CARD4.
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
	ICC/IF	0.5 - 1 µg/ml
	IHC-P	0.5 - 1 µg/ml
Application Note	IHC-P: Antigen Retrieval: Heat mediated was performed in Citrate buffer (pH 6.0) for 20 min. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

Properties

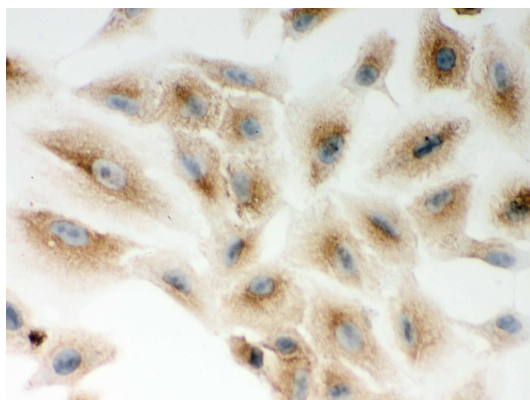
Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	0.9% NaCl, 0.2% Na ₂ HPO ₄ , 0.05% Sodium azide and 5% BSA.
Preservative	0.05% Sodium azide
Stabilizer	5% BSA
Concentration	0.5 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term 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

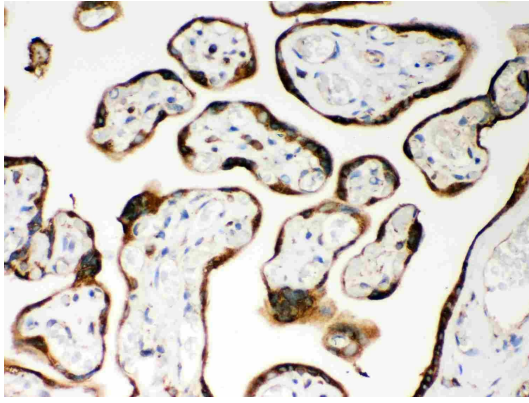
Gene Symbol	NOD1
Gene Full Name	nucleotide-binding oligomerization domain containing 1
Background	This gene encodes a member of the NOD (nucleotide-binding oligomerization domain) family. This member is a cytosolic protein. It contains an N-terminal caspase recruitment domain (CARD), a centrally located 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 differing 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 activation. [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



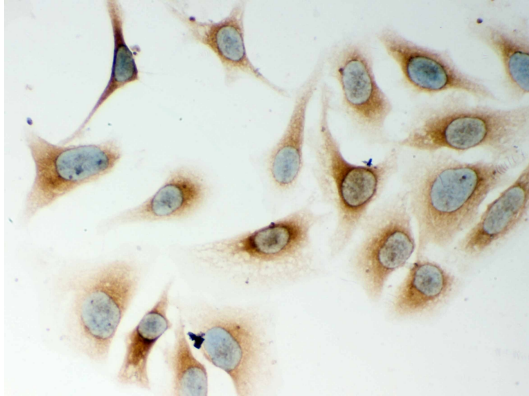
ARG59215 anti-NOD1 / CARD4 antibody ICC image

Immunocytochemistry: A549 cells stained with ARG59215 anti-NOD1 / CARD4 antibody.



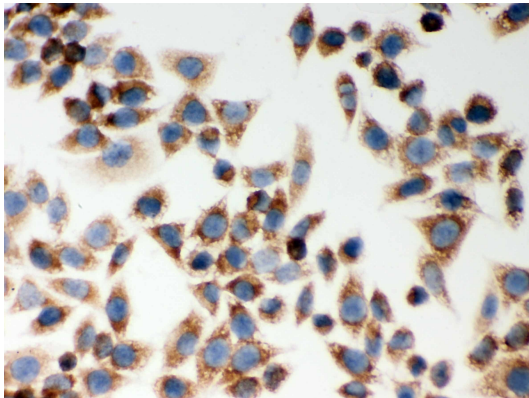
ARG59215 anti-NOD1 / CARD4 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human placenta Tissue. Antigen Retrieval: Heat mediated was performed in Citrate buffer (pH 6.0, epitope retrieval solution) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG59215 anti-NOD1 / CARD4 antibody at 1 µg/ml dilution, overnight at 4°C.



ARG59215 anti-NOD1 / CARD4 antibody ICC image

Immunocytochemistry: HeLa cells stained with ARG59215 anti-NOD1 / CARD4 antibody.



ARG59215 anti-NOD1 / CARD4 antibody ICC image

Immunocytochemistry: SMMC-7721 cells stained with ARG59215 anti-NOD1 / CARD4 antibody.