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NLRC3 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP57461

Product Information

Application	WB, IHC-P, IHC-F, IF, ICC, E
Primary Accession	Q7RTR2
Reactivity	Pig, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	114658
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human NLRC3
Epitope Specificity	721-820/1065
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cytoplasm.
SIMILARITY	Belongs to the NLRP family. Contains 16 LRR (leucine-rich) repeats. Contains 1 NACHT domain.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	This gene encodes a NOD-like receptor family member. The encoded protein is a cytosolic regulator of innate immunity. This protein directly interacts with stimulator of interferon genes (STING), to prevent its proper trafficking, resulting in disruption of STING-dependent activation of the innate immune response. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Feb 2014]

Additional Information

Gene ID	197358
Other Names	NLR family CARD domain-containing protein 3, CARD15-like protein, Caterpiller protein 16.2, CLR16.2, NACHT, LRR and CARD domains-containing protein 3, Nucleotide-binding oligomerization domain protein 3, NLRC3, NOD3
Target/Specificity	Detected in peripheral blood mononuclear cells.
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When

reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	NLRC3
Synonyms	NOD3
Function	Negative regulator of the innate immune response (PubMed: 15705585, PubMed:22863753, PubMed:25277106). Attenuates signaling pathways activated by Toll-like receptors (TLRs) and the DNA sensor STING/TMEM173 in response to pathogen-associated molecular patterns, such as intracellular poly(dA:dT), but not poly(I:C), or in response to DNA virus infection, including that of Herpes simplex virus 1 (HSV1) (By similarity) (PubMed:22863753). May affect TLR4 signaling by acting at the level of TRAF6 ubiquitination, decreasing the activating 'Lys-63'-linked ubiquitination and leaving unchanged the degradative 'Lys-48'-linked ubiquitination (PubMed:22863753). Inhibits the PI3K-AKT-mTOR pathway possibly by directly interacting with the posphatidylinositol 3-kinase regulatory subunit p85 (PIK3R1/PIK3R2) and disrupting the association between PIK3R1/PIK3R2 and the catalytic subunit p110 (PIK3CA/PIK3CB/PIK3CD) and reducing PIK3R1/PIK3R2 activation. Via its regulation of the PI3K-AKT-mTOR pathway, controls cell proliferation, predominantly in intestinal epithelial cells (By similarity). May also affect NOD1- or NOD2-mediated NF-kappa-B activation (PubMed:25277106). Might also affect the inflammatory response by preventing NLRP3 inflammasome formation, CASP1 cleavage and IL1B maturation (PubMed:25277106).
Cellular Location	Cytoplasm