

Rabbit CARD12 Polyclonal Antibody | anti-NLRC4 antibody

CARD12 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA329157	Rabbit	Human, Mouse, Rat Predicted Reactivity: Bovine(88%), Sheep(100%), Rabbit(100%)	ELISA

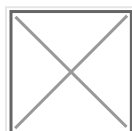
PRODUCT SYNONYMS

CARD12; Polyclonal Antibody; CARD12 Antibody; and NACHT-containing protein; CARD 12; CARD; CARD LRR and NACHT containing protein 1; CARD LRR and NACHT containing protein; Caspase recruitment domain containing protein 12; Caspase recruitment domain family member 12; Caspase recruitment domain-containing protein 12; CLAN 1; CLAN A; CLAN; CLAN B; CLAN C; CLAN D; Clan protein; CLAN1; CLANA; CLANB; CLANC; CLAND; CLR 2.1; CLR2.1; ICE protease activating factor; Ice protease-activating factor; Ipaf; LRR; NLR family CARD domain containing 4; NLR family CARD domain-containing protein 4; NLRC 4; NLRC4; NLRC4_HUMAN; NOD like receptor C4; Nucleotide binding oligomerization domain leucine rich repeat and CARD domain containing 4; UNQ6189/PRO20215; anti-NLRC4 antibody

PRODUCT SPECIFICATIONS

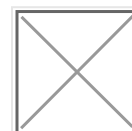
Host	Rabbit
Reactivity	Human, Mouse, Rat Predicted Reactivity: Bovine(88%), Sheep(100%), Rabbit(100%)
Clonality	Polyclonal
Isotype	IgG
Specificity	CARD12 Antibody detects endogenous levels of total CARD12.
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin (Thermo Fisher Scientific).
Form/Format	Liquid. Rabbit IgG in phosphate buffered saline, pH7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol
Concentration	1mg/ml (varies by lot)
Sequence Length	1024
Applicable Applications for anti-NLRC4 antibody	ELISA
Immunogen	A synthesized peptide derived from human CARD12, corresponding to a region within the internal amino acids.
Fragment	Fab fragment
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



IHC (Immunohistochemistry)

AAA329157 at 1/100 staining Human kidney cancer and adjacent normal tissues by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4Â°C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



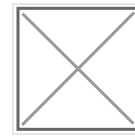
IHC (Immunohistochemistry)

AAA329157 at 1/100 staining Mouse kidney tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4Â°C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



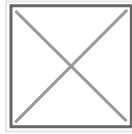
IHC (Immunohistochemisry)

AAA329157 at 1/100 staining Rat heart tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4Â°C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



IHC (Immunohiostchemistry)

AAA329157 at 1/100 staining Rat liver tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4Â°C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



WB (Western Blot)

Western blot analysis of extracts from Human Fetal brain, using CARD12 Antibody. The lane on the left was treated with blocking peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-NLRC4 antibody

Function: Key component of inflammasomes that indirectly senses specific proteins from pathogenic bacteria and fungi and responds by assembling an inflammasome complex that promotes caspase-1 activation, cytokine production and macrophage pyroptosis (PubMed:15107016). The NLRC4 inflammasome is activated as part of the innate immune response to a range of intracellular bacteria (By similarity).

Post Translational Modifications: Phosphorylated at Ser-533 following infection of macrophages with S.typhimurium (Salmonella). Phosphorylation is essential for NLRC4 inflammasome function to promote caspase-1 activation and pyroptosis. PRKCD phosphorylates Ser-533 in vitro.

Subcellular Location: Cytoplasm. Cytoplasm>Cytosol. Note: Cytoplasmic filaments.

Tissue Specificity: Isoform 2 is expressed ubiquitously, although highly expressed in lung and spleen. Isoform 1 is highly expressed in lung, followed by leukocytes especially monocytes, lymph node, colon, brain, prostate, placenta, spleen, bone marrow and fetal liver. Isoform 4 is only detected in brain.

Subunit Structure: Homooligomer (PubMed:25385754). Homooligomerizes following activation of Naip proteins by pathogenic proteins such as S.typhimurium (Salmonella) flagellin or PrgJ. Component of the NLRC4 inflammasome, at least composed of NLRC4, caspase-1 (CASP1) and some NAIP family member (By similarity). Interacts with ASC, pro-caspase-1, NOD2, BCL10 and NALP1 (NAC) by CARD-CARD interaction. Interacts with EIF2AK2/PKR (PubMed:22801494).

Similarity: In an autoinhibited form the C-terminal leucine-rich repeat (LRR) domain is positioned to sterically occlude one side of the NBD domain and consequently sequester NLRC4 in a monomeric state. An ADP-mediated interaction between the NBD and the WHD also contributes to the autoinhibition.

NCBI AND UNIPROT INFORMATION

NCBI GI #	40788015
NCBI GeneID	58484
NCBI Accession #	NP_067032
NCBI GenBank Nucleotide #	NP_067032.3
UniProt Accession #	Q9NPP4
Molecular Weight	Observed Molecular Weight: (Observed)116kD. Predicted Molecular Weight: (Calculated)116kDa.
NCBI Official Full Name	NLR family CARD domain-containing protein 4 isoform a
NCBI Official Synonym Full Names	NLR family CARD domain containing 4

NCBI Official Symbol	NLRC4
NCBI Official Synonym Symbols	CLAN; IPAF; AIFEC; CLAN1; CLANA; CLANB; CLANC; CLAND; FCAS4; CARD12; CLR2.1
NCBI Protein Information	NLR family CARD domain-containing protein 4
UniProt Protein Name	NLR family CARD domain-containing protein 4
UniProt Gene Name	NLRC4
UniProt Synonym Gene Names	CARD12; CLAN; CLAN1; IPAF; Clan protein; Ipaf
UniProt Entry Name	NLRC4_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/card12-antibody-elisa/329157>