

CARD8 / Cardinal / TUCAN Antibody (C-Terminus)
Rabbit Polyclonal Antibody
Catalog # ALS11403**Specification****CARD8 / Cardinal / TUCAN Antibody (C-Terminus) - Product Information**

Application	WB, IHC-P, IF, ICC
Primary Accession	O9Y2G2
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	49kDa KDa
Dilution	WB~~1:1000 IHC-P~~N/A IF~~1:50~200 ICC~~N/A

CARD8 / Cardinal / TUCAN Antibody (C-Terminus) - Additional Information**Gene ID** 22900**Other Names**

Caspase recruitment domain-containing protein 8, Apoptotic protein NDPP1, CARD-inhibitor of NF-kappa-B-activating ligand, CARDINAL, DACAR, Tumor up-regulated CARD-containing antagonist of CASP9, TUCAN, CARD8, KIAA0955, NDPP1

Target/Specificity

synthetic peptide corresponding to amino acids at the C-terminus of human CARD8

Reconstitution & Storage

Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles. Store undiluted.

Precautions

CARD8 / Cardinal / TUCAN Antibody (C-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

CARD8 / Cardinal / TUCAN Antibody (C-Terminus) - Protein Information**Name** CARD8 {ECO:0000303|PubMed:11821383, ECO:0000312|HGNC:HGNC:17057}**Function**

Inflammasome sensor, which mediates inflammasome activation in response to various pathogen-associated signals, leading to subsequent pyroptosis of CD4(+) T-cells and macrophages (PubMed:11408476, PubMed:11821383, PubMed:15030775, PubMed:32051255, PubMed:32840892),

PubMed:33542150, PubMed:34019797, PubMed:36357533). Inflammasomes are supramolecular complexes that assemble in the cytosol in response to pathogens and other damage-associated signals and play critical roles in innate immunity and inflammation (PubMed:11408476, PubMed:11821383, PubMed:15030775, PubMed:36357533). Acts as a recognition receptor (PRR): recognizes specific pathogens and other damage-associated signals, such as HIV-1 protease activity or Val- boroPro inhibitor, and mediates CARD8 inflammasome activation (PubMed:32840892, PubMed:33542150, PubMed:36357533). In response to pathogen-associated signals, the N-terminal part of CARD8 is degraded by the proteasome, releasing the cleaved C-terminal part of the protein (Caspase recruitment domain-containing protein 8, C-terminus), which polymerizes to initiate the formation of the inflammasome complex: the CARD8 inflammasome directly recruits pro-caspase-1 (proCASP1) independently of PYCARD/ASC and promotes caspase-1 (CASP1) activation, which subsequently cleaves and activates inflammatory cytokines IL1B and IL18 and gasdermin-D (GSDMD), leading to pyroptosis (PubMed:32051255, PubMed:32840892, PubMed:33053349, PubMed:33542150, PubMed:36357533). Ability to sense HIV-1 protease activity leads to the clearance of latent HIV-1 in patient CD4(+) T-cells after viral reactivation; in contrast, HIV-1 can evade CARD8-sensing when its protease remains inactive in infected cells prior to viral budding (PubMed:33542150). Also acts as a negative regulator of the NLRP3 inflammasome (PubMed:24517500). May also act as an inhibitor of NF- kappa-B activation (PubMed:11551959, PubMed:12067710).

Cellular Location

Cytoplasm. Nucleus

Tissue Location

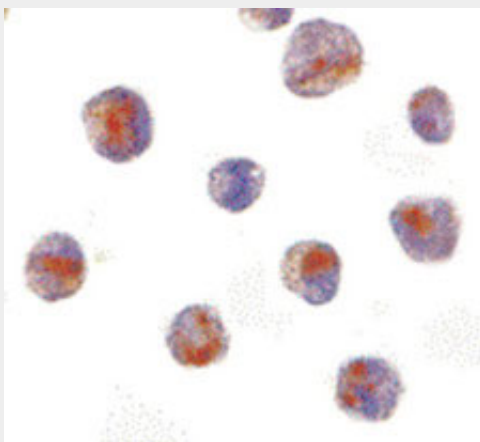
High expression in lung, ovary, testis and placenta (PubMed:11551959). Lower expression in heart, kidney and liver (PubMed:11551959). Also expressed in spleen, lymph node and bone marrow (PubMed:11821383).

CARD8 / Cardinal / TUCAN Antibody (C-Terminus) - Protocols

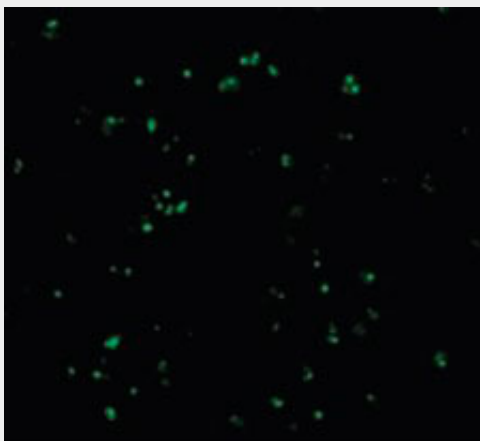
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)

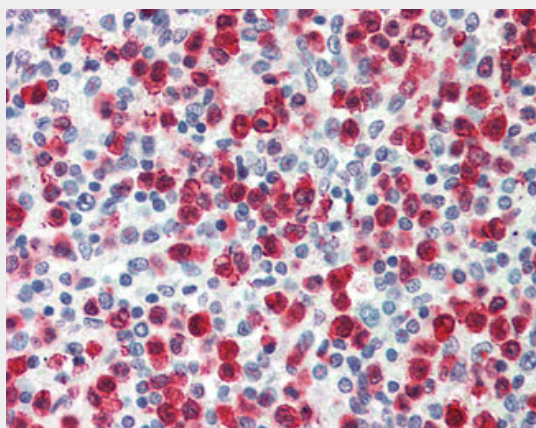
- [Cell Culture](#)

CARD8 / Cardinal / TUCAN Antibody (C-Terminus) - Images

Immunocytochemistry of CARD8 in K562 cells with CARD8 antibody at 10 ug/ml.



Immunofluorescence of CARD8 in K562 cells with CARD8 antibody at 20 ug/ml.



Anti-CARD8 antibody IHC of human spleen.

CARD8 / Cardinal / TUCAN Antibody (C-Terminus) - Background

Inhibits NF-kappa-B activation. May participate in a regulatory mechanism that coordinates cellular responses controlled by NF-kappa-B transcription factor. May be a component of the inflammasome, a protein complex which also includes PYCARD, NALP2 and CASP1 and whose

function would be the activation of proinflammatory caspases.

CARD8 / Cardinal / TUCAN Antibody (C-Terminus) - References

- Nagase T.,et al.DNA Res. 6:63-70(1999).
Razmara M.,et al.J. Biol. Chem. 277:13952-13958(2002).
Zhang H.,et al.Int. J. Oncol. 20:1035-1040(2002).
Guet C.,et al.Submitted (JAN-2001) to the EMBL/GenBank/DDBJ databases.
Bouchier-Hayes L.,et al.J. Biol. Chem. 276:44069-44077(2001).