Datasheet for ABIN7144464

anti-PYCARD antibody (AA 1-195)

3 Images

Go to Product page

Overview

Quantity:	100 µL
Target:	PYCARD
Binding Specificity:	AA 1-195
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This PYCARD antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC)

Product Details

Immunogen:	Recombinant Human Apoptosis-associated speck-like protein containing a CARD protein (1-195AA)
Isotype:	IgG
Cross-Reactivity:	Human, Mouse
Purification:	>95%, Protein G purified

Target Details

Target:	PYCARD
Alternative Name:	PYCARD (PYCARD Products)
Background:	Background: Functions as key mediator in apoptosis and inflammation. Promotes caspase-

mediated apoptosis involving predominantly caspase-8 and also caspase-9 in a probable cell type-specific manner. Involved in activation of the mitochondrial apoptotic pathway, promotes caspase-8-dependent proteolytic maturation of BID independently of FADD in certain cell types and also mediates mitochondrial translocation of BAX and activates BAX-dependent apoptosis coupled to activation of caspase-9, -2 and -3. Involved in macrophage pyroptosis, a caspase-1-dependent inflammatory form of cell death and is the major constituent of the ASC pyroptosome which forms upon potassium depletion and rapidly recruits and activates caspase-1. In innate immune response believed to act as an integral adapter in the assembly of the inflammasome which activates caspase-1 leading to processing and secretion of proinflammatory cytokines. The function as activating adapter in different types of inflammasomes is mediated by the pyrin and CARD domains and their homotypic interactions. Required for recruitment of caspase-1 to inflammasomes containing certain pattern recognition receptors, such as NLRP2, NLRP3, AIM2 and probably IFI16. In the NLRP1 and NLRC4 inflammasomes seems not be required but facilitates the processing of procaspase-1. In cooperation with NOD2 involved in an inflammasome activated by bacterial muramyl dipeptide leading to caspase-1 activation. May be involved in DDX58-triggered proinflammatory responses and inflammasome activation. Isoform 2 may have a regulating effect on the function as inflammasome adapter. Isoform 3 seems to inhibit inflammasome-mediated maturation of interleukin-1 beta. In collaboration with AIM2 which detects cytosolic double-stranded DNA may also be involved in a caspase-1-independent cell death that involves caspase-8. In adaptive immunity may be involved in maturation of dendritic cells to stimulate T-cell immunity and in cytoskeletal rearrangements coupled to chemotaxis and antigen uptake may be involved in post-transcriptional regulation of the guanine nucleotide exchange factor DOCK2, the latter function is proposed to involve the nuclear form. Also involved in transcriptional activation of cytokines and chemokines independent of the inflammasome, this function may involve AP-1, NF-kappa-B, MAPK and caspase-8 signaling pathways. For regulation of NF-kappa-B activating and inhibiting functions have been reported. Modulates NF-kappa-B induction at the level of the IKK complex by inhibiting kinase activity of CHUK and IKBK. Proposed to compete with RIPK2 for association with CASP1 thereby down-regulating CASP1-mediated RIPK2-dependent NF-kappa-B activation and activating interleukin-1 beta processing. Modulates host resistance to DNA virus infection, probably by inducing the cleavage of and inactivating MB21D1 in presence of cytoplasmic double-stranded DNA (PubMed:28314590).

Aliases: Apoptosis associated speck like protein containing a CARD antibody, Apoptosis-associated speck-like protein containing a CARD antibody, ASC antibody, ASC_HUMAN antibody, CARD 5 antibody, CARD5 antibody, Caspase recruitment domain containing protein 5

Target Details

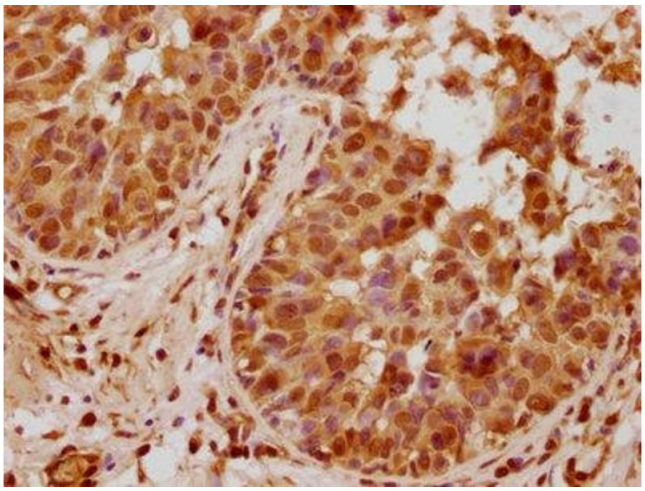
	antibody, Caspase recruitment domain protein 5 antibody, Caspase recruitment domain-containing protein 5 antibody, hASC antibody, MGC10332 antibody, PYCARD antibody, PYD and CARD domain containing antibody, PYD and CARD domain containing protein antibody, PYD and CARD domain-containing protein antibody, Target of methylation induced silencing 1 antibody, Target of methylation-induced silencing 1 antibody, TMS 1 antibody, TMS antibody, TMS1 antibody
UniProt:	Q9ULZ3
Pathways:	Activation of Innate immune Response, Cellular Response to Molecule of Bacterial Origin, Regulation of Actin Filament Polymerization, Positive Regulation of Endopeptidase Activity, Activated T Cell Proliferation, Inflammasome

Application Details

Application Notes:	Recommended dilution: WB:1:1000-1:5000, IHC:1:500-1:1000,
Restrictions:	For Research Use only

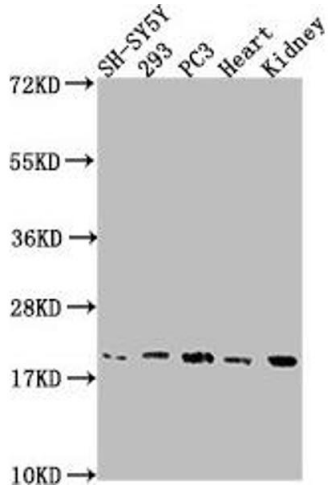
Handling

Format:	Liquid
Buffer:	Preservative: 0.03 % Proclin 300 Constituents: 50 % Glycerol, 0.01M PBS, pH 7.4
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C,-80 °C
Storage Comment:	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.



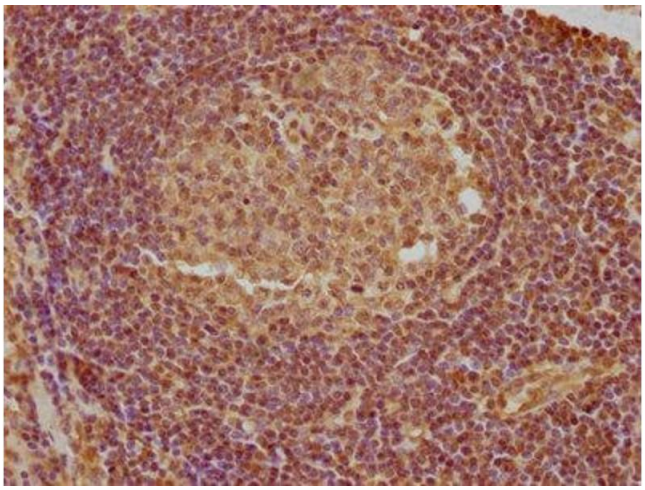
Immunohistochemistry

Image 1. IHC image of ABIN7144464 diluted at 1:740 and staining in paraffin-embedded human breast cancer performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10 % normal goat serum 30 min at RT. Then primary antibody (1 % BSA) was incubated at 4 °C overnight. The primary is detected by a biotinylated secondary antibody and visualized using an HRP conjugated SP system.



Western Blotting

Image 2. Western Blot Positive WB detected in: SH-SY5Y whole cell lysate, 293 whole cell lysate, PC3 whole cell lysate, Mouse heart tissue, Mouse kidney tissue All lanes: PYCARD antibody at 1:2000 Secondary Goat polyclonal to rabbit IgG at 1/50000 dilution Predicted band size: 22, 20, 16 kDa Observed band size: 20 kDa



Immunohistochemistry

Image 3. IHC image of ABIN7144464 diluted at 1:740 and staining in paraffin-embedded human lymph node tissue performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10 % normal goat serum 30 min at RT. Then primary antibody (1 % BSA) was incubated at 4 °C overnight. The primary is detected by a biotinylated secondary antibody and visualized using an HRP conjugated SP system.