

## Anti-CARD12 Picoband Antibody

Catalog # ABO12359

#### Specification

# Anti-CARD12 Picoband Antibody - Product Information

ApplicationWBPrimary AccessionO9NPP4HostRabbitReactivityHuman, Mouse, RatClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for NLR family CARD domain-containing protein 4(NLRC4)detection. Tested with WB in Human; Mouse; Rat.

**Reconstitution** Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

## Anti-CARD12 Picoband Antibody - Additional Information

Gene ID 58484

**Other Names** NLR family CARD domain-containing protein 4, CARD, LRR, and NACHT-containing protein, Clan protein, Caspase recruitment domain-containing protein 12, Ice protease-activating factor, Ipaf, NLRC4, CARD12, CLAN, CLAN1, IPAF

Calculated MW 116159 MW KDa

**Application Details** Western blot, 0.1-0.5 μg/ml, Human, Mouse, Rat<br>

**Subcellular Localization** Cytoplasm . Cytoplasm, cytosol . 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.

Protein Name NLR family CARD domain-containing protein 4

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human CARD12 (838-874aa



KILAQNLHNLVKLSILDLSENYLEKDGNEALHELIDR), different from the related mouse sequence by five amino acids, and from the related rat sequence by seven amino acids.

**Purification** Immunogen affinity purified.

**Cross Reactivity** No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

## Anti-CARD12 Picoband Antibody - Protein Information

Name NLRC4

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:<a href="http://www.uniprot.org/citations/15107016" target="\_blank">15107016</a>). The NLRC4 inflammasome is activated as part of the innate immune response to a range of intracellular bacteria (By similarity).

Cellular Location Cytoplasm. Cytoplasm, cytosol {ECO:0000250|UniProtKB:Q3UP24}. Inflammasome

Tissue Location

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

#### **Anti-CARD12 Picoband Antibody - Protocols**

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

- <u>Western Blot</u>
- Blocking Peptides
- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-CARD12 Picoband Antibody - Images





Anti- CARD12 Picoband antibody, ABO12359, Western blottingAll lanes: Anti CARD12 (ABO12359) at 0.5ug/mlLane 1: 22RV1 Whole Cell Lysate at 40ugLane 2: RH35 Whole Cell Lysate at 40ugLane 3: NIH3T3 Whole Cell Lysate at 40ugPredicted bind size: 116KDObserved bind size: 116KD

#### Anti-CARD12 Picoband Antibody - Background

NLR family CARD domain-containing protein 4, also known as CARD12, is a protein that in humans is encoded by the NLRC4 gene. It is mapped to 2p22.3. This gene encodes a member of the caspase recruitment domain-containing NLR family. Family members play essential roles in innate immune response to a wide range of pathogenic organisms, tissue damage and other cellular stresses. Mutations in this gene result in autoinflammation with infantile enterocolitis. Alternative splicing results in multiple transcript variants.