

# CARD14 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP58588

#### **Product Information**

**Application** WB, IHC-P, IHC-F, IF, ICC, E

Primary Accession Q9BXL6

**Reactivity** Rat, Pig, Dog, Bovine

Host Rabbit
Clonality Polyclonal
Calculated MW 113270
Physical State Liquid

Immunogen KLH conjugated synthetic peptide derived from human CARD14

**Epitope Specificity** 1-100/1004

**Isotype** IgG

**Purity** affinity purified by Protein A

Buffer SUBCELLULAR LOCATION

SUBCELLULAR LUCATION

**SIMILARITY** 

0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. Isoform 1: Cytoplasm.Isoform 2: Cytoplasm.Isoform 3: Cytoplasm.

Contains 1 CARD domain. Contains 1 guanylate kinase-like domain. Contains 1

PDZ (DHR) domain.

**SUBUNIT** Interacts with BCL10 by CARD-CARD interaction. Interacts with TRAF2, TRAF3

and TRAF6.

**DISEASE** Psoriasis 2 (PSORS2) [MIM:602723]: A common, chronic inflammatory disease

of the skin with multifactorial etiology. It is characterized by red, scaly plaques usually found on the scalp, elbows and knees. These lesions are caused by abnormal keratinocyte proliferation and infiltration of inflammatory cells into the dermis and epidermis. Note=Disease susceptibility is associated with variations affecting the gene represented in this entry. Pityriasis rubra pilaris (PRP) [MIM:173200]: A rare, papulosquamous skin disease characterized by

the appearance of keratotic follicular papules, well-demarcated

salmon-colored erythematous plaques covered with fine powdery scales interspersed with distinct islands of uninvolved skin, and palmoplantar keratoderma. Most cases are sporadic. The rare familial cases show autosomal dominant inheritance with incomplete penetrance and variable expression. Familial PRP usually presents at birth or appears during the first years of life and runs a chronic course. It is characterized by prominent follicular hyperkeratosis, diffuse palmoplantar keratoderma, and erythema. Note=The disease is caused by mutations affecting the gene represented in

this entry.

**Important Note** This product as supplied is intended for research use only, not for use in

human, therapeutic or diagnostic applications.

**Background Descriptions**The protein encoded by this gene belongs to the membrane-associated guanylate kinase (MAGUK) family, a class of proteins that functions as

molecular scaffolds for the assembly of multiprotein complexes at specialized regions of the plasma membrane. This protein is also a member of the CARD

protein family, which is defined by carrying a characteristic

caspase-associated recruitment domain (CARD). This protein shares a similar domain structure with CARD11 protein. The CARD domains of both proteins

1 of 3

have been shown to specifically interact with BCL10, a protein known to function as a positive regulator of cell apoptosis and NF-kappaB activation. When expressed in cells, this protein activated NF-kappaB and induced the phosphorylation of BCL10. Two alternatively spliced variants of this gene encoding distinct isoforms have been reported.

### **Additional Information**

**Gene ID** 79092

Other Names Caspase recruitment domain-containing protein 14, CARD-containing MAGUK

protein 2, Carma 2, CARD14, CARMA2

**Target/Specificity** Isoform 1 is detected in placenta and epidermal keratinocytes. Isoform 2 is

detected in leukocytes and fetal brain.

**Dilution** WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100,IF=1:100-500,ELI

SA=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 CARD14

Synonyms CARMA2

**Function** Acts as a scaffolding protein that can activate the inflammatory transcription

factor NF-kappa-B and p38/JNK MAP kinase signaling pathways. Forms a signaling complex with BCL10 and MALT1, and activates MALT1 proteolytic activity and inflammatory gene expression. MALT1 is indispensable for CARD14-induced activation of NF-kappa-B and p38/JNK MAP kinases

(PubMed:11278692, PubMed:21302310, PubMed:27071417,

PubMed: 27113748). May play a role in signaling mediated by TRAF2, TRAF3

and TRAF6 and protects cells against apoptosis.

**Cellular Location** [Isoform 1]: Cytoplasm [Isoform 3]: Cytoplasm

**Tissue Location** Isoform 1 is detected in placenta and epidermal keratinocytes

(PubMed:22521418). Isoform 2 is detected in leukocytes and fetal brain

(PubMed:22521418).

## **Images**

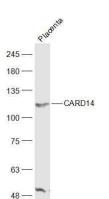
Sample:

Placenta (Mouse) Lysate at 40 ug

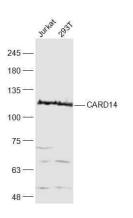
Primary: Anti-CARD14 (AP58588) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at

1/20000 dilution

Predicted band size: 113 kD



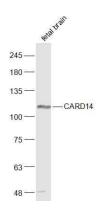
Observed band size: 113 kD



## Sample:

Jurkat(Human) Cell Lysate at 30 ug 293T(Human) Cell Lysate at 30 ug Primary: Anti-CARD14 (AP58588) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 113 kD Observed band size: 113 kD



### Sample:

Fetal brain (Mouse) Lysate at 40 ug

Primary: Anti-CARD14 (AP58588) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at

1/20000 dilution

Predicted band size: 113 kD Observed band size: 113 kD

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.