

# Rabbit Anti-CARD11 antibody

# SL6201R

Product Name:	CARD11
Chinese Name:	凋亡加强结构域蛋白11抗体
Alias:	Bcl10 interacting maguk protein 3; BIMP 3; BIMP3; CAR11_HUMAN; CARD 11; CARD containing MAGUK protein 3; Card maguk protein 1; CARD-containing MAGUK protein 1; CARD11; CARD11 protein; Carma 1; CARMA1; Caspase recruitment domain containing protein 11; Caspase recruitment domain family member 11; Caspase recruitment domain-containing protein 11; MGC133069.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken, Dog, Cow,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	133kDa
Cellular localization:	cytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	lmg/ml
immunogen:	KLH conjugated synthetic peptide derived from human CARD11:301-400/1154
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. 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.
PubMed:	<u>PubMed</u>
Product Detail:	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 has a domain structure similar to that of CARD14 protein. The CARD domains of both proteins 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.

#### **Function:**

Involved in the costimulatory signal essential for T-cell receptor (TCR)-mediated T-cell activation. Its binding to DPP4 induces T-cell proliferation and NF-kappa-B activation in a T-cell receptor/CD3-dependent manner. Activates NF-kappa-B via BCL10 and IKK. Stimulates the phosphorylation of BCL10.

#### Subunit:

Found in a membrane raft complex, at least composed of BCL10, CARD11, DPP4 and IKBKB. CARD11 and BCL10 bind to each other by CARD-CARD interaction. Interacts (via PDZ domain) with DPP4 (via cytoplasmic tail).

#### **Subcellular Location:**

Cytoplasm. Membrane raft. Note=Colocalized with DPP4 in membrane rafts.

### Tissue Specificity:

Detected in adult peripheral blood leukocytes, thymus, spleen and liver. Also found in promyelocytic leukemia HL-60 cells, chronic myelogenous leukemia K-562 cells, Burkitt's lymphoma Raji cells and colorectal adenocarcinoma SW480 cells. Not detected in HeLaS3, MOLT-4, A-549 and G431 cells.

#### Post-translational modifications:

Phosphorylation at Ser-559, Ser-644 and Ser-652 by PRKCB and PRKCQ leads to a shift from an inactive to an active form that activates the NF-kappa-B signaling

## Similarity:

Contains 1 CARD domain.

Contains 1 guanylate kinase-like domain.

Contains 1 PDZ (DHR) domain.

#### SWISS:

Q9BXL7

#### Gene ID:

84433

#### Database links:

Entrez Gene: 84433Human

Entrez Gene: 108723Mouse

Omim: 607210Human

SwissProt: Q9BXL7Human

SwissProt: Q8CIS0Mouse

Unigene: 648101Human

Unigene: 46187 Mouse

# **Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.