

# CARMA3 Antibody

Catalog # ASC10209

## **Specification**

#### **CARMA3 Antibody - Product Information**

IHC

Application	
Primary Accession	
Other Accession	

Reactivity Host Clonality Isotype Application Notes O9BWT7 NP\_055365, 51093861 Human Rabbit Polyclonal IgG CARMA3 antibody can be used for detection of CARMA3 by immu nohistochemistry at 5 µg/mL.

#### **CARMA3 Antibody - Additional Information**

Gene ID 29775 Other Names CARMA3 Antibody: BIMP1, CARMA3, Caspase recruitment domain-containing protein 10, CARD-containing MAGUK protein 3, Carma 3, caspase recruitment domain family, member 10

## **Target/Specificity**

CARD10; CARMA3 antibody is human specific. At least three isoforms of CARMA3 are known to exist; this antibody will only detect isoform 1. CARMA3 antibody is predicted not to cross-react with other CARMA proteins.

## **Reconstitution & Storage**

CARMA3 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

## **Precautions**

CARMA3 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.



Immunohistochemistry of CARMA3 in human kidney tissue with CARMA3 antibody at 5 µg/ml

# **CARMA3 Antibody - Background**

CARMA3 Antibody: CARMA proteins belong to the membrane-associated guanylate kinase-like (MAGUK) family of proteins that can function as molecular scaffolds that assist assembly of signal transduction molecules. CARMA1, CARMA2, and CARMA3 share high degrees of sequence and functional homology, but their tissue-specific distribution suggests that they serve distinct biological functions in different cell types. As with CARMA1, the CARD domain of CARMA3 has been shown to specifically interact with BCL10, a protein known to function as a positive regulator of cell apoptosis and NF-KB activation. When expressed in cells, this protein binds to BCL10 and activates NF-KB Recent experiments have shown that CARMA3 is required for EGF-induced NF-KB activation and contributes to tumor growth in vivo, suggesting that CARMA3 may serve as a new therapeutic target for the treatment of EGFR-driven tumors.

# **CARMA3 Antibody - References**

Fanning AS and Anderson JM. Protein modules as organizers of membrane structure. Curr. Opin. Cell Biol. 1999; 11:432-9.



#### CARMA3 Antibody - Protein Information

Name CARD10

Synonyms CARMA3

Function Activates NF-kappa-B via BCL10 and IKK.

Cellular Location Cytoplasm.

Tissue Location

Detected in adult heart, kidney and liver; lower levels in intestine, placenta, muscle and lung. Also found in fetal lung, liver and kidney

## **CARMA3 Antibody - Protocols**

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

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

Gaide O, Martinon F, Michau O, et al. Carma1, 1 CARD-containing binding partner of Bcl10, induces Bcl10 phosphorylation and NF-kappa B activation. FEBS Lett. 2001; 496:121-7. Wang L, Guo Y, Huang WJ, et al. Card10 is a novel caspase recruitment domain/membrane-associated guanylate kinase family member that interacts with BCL10 and activates NF-kappaB. J. Biol. Chem. 2001; 276:21405-9. Jiang T, Grabiner B, Zhu Y, et al. CARMA3 is crucial for EGFR-induced activation of NF-kappaB and tumor progression. Cancer Res. 2011; 71:2183-92.