

CARMA3 Antibody

Catalog # ASC10209

Specification

CARMA3 Antibody - Product Information

Application IHC
Primary Accession Q9BWT7

Other Accession <u>NP_055365</u>, <u>51093861</u>

Reactivity
Host
Clonality
Polyclonal
Isotype
Human
Rabbit
Polyclonal

Application Notes CARMA3 antibody can be used for

detection of CARMA3 by

immunohistochemistry 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.

CARMA3 Antibody - Protein Information

Name CARD10

Synonyms CARMA3

Function

Scaffold protein that plays an important role in mediating the activation of NF-kappa-B via BCL10 or EGFR.

Cellular Location

Cytoplasm.



Tissue Location

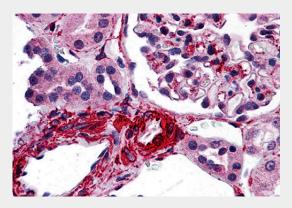
Detected in adult heart, kidney and liver; lower levels in intestine, placenta, muscle and lung. Also found in fetal lung, liver and kidney

CARMA3 Antibody - Protocols

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

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

CARMA3 Antibody - Images



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.

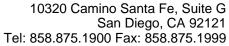
CARMA3 Antibody - References

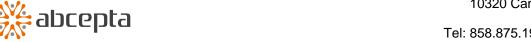
Fanning AS and Anderson JM. Protein modules as organizers of membrane structure. Curr. Opin. Cell Biol. 1999; 11:432-9.

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.