

# **MAGI1 Polyclonal Antibody**

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP54467

## **Specification**

# **MAGI1 Polyclonal Antibody - Product Information**

Application Primary Accession Reactivity

Host Clonality Calculated MW Physical State Immunogen

Epitope Specificity Isotype

Purity

affinity purified by Protein A

Buffer

SUBCELLULAR LOCATION

**SIMILARITY** 

**SUBUNIT** 

Important Note

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

Q96QZ7

Rat, Pig, Dog, Bovine

Rabbit Polyclonal 137 KDa Liquid

KLH conjugated synthetic peptide derived

from human MAGI1

161-260/1491

IqG

0.01M TBS (pH7.4) with 1% BSA, 0.02%

Proclin300 and 50% Glycerol.

Cell junction; cell membrane; tight junction; peripheral membrane protein. Localizes to epithelial cells tight junctions. Contains 1 guanylate kinase-like domain. Contains 6 PDZ (DHR) domains. Contains 2

WW domains.

Interacts through its WW 2 domain with SYNPO and through its PDZ 5 domain with ACTN4. Interacts with cytoplasmic domain of BAI1. Interacts via its WW domains with DRPLA. Interacts with ESAM, LRP2 and CXADR. May interact with CTNNB1. Interacts through its PDZ 1 domain with

**NET1** (By similarity). Interacts with ASIC3 and AMOT. Interacts with FCHSD2.

Interacts with IGSF5/JAM4 and through its PDZ 2 and 3 domains with NPHS1 forming

a tripartite complex (By similarity).

Interacts with DDN.

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

# **Background Descriptions**

The membrane-associated guanylate kinase (MAGUK) proteins are concentrated at the membrane-cytoskeletal interface where they facilitate the assembly of multiprotein complexes on the inner surface of the plasma membrane. Three protein-protein interaction modules characteristically define MAGUK related proteins: the PDZ domain, the SH3 domain and the guanylate kinase (GuK) domain. The closely related MAGUK proteins, MAGI-1, MAGI-2 and MAGI-3 (membrane associated guanylate kinase inverted-1 and 2), likewise contain the GuK domain and



five PDZ domains; however, the SH3 domain is replaced with a WW domain. The transcripts of MAGI-1 are alternatively spliced to produce three distinct proteins having unique C-terminals. Two variants, MAGI-1a and MAGI-1b, are associated with the membrane and cytosolic fractions and are primarily expressed in the brain. The third isoform, MAGI-1c, encodes for a nuclear localization signal that localizes MAGI-1c to the nucleus, and it is primarily expressed in the liver and kidney. MAGI-2 and MAGI-3 are localized to the plasma membrane, and they contribute to protein scaffolding by associating with the protein phosphatase PTEN.

### **MAGI1 Polyclonal Antibody - Additional Information**

**Gene ID 9223** 

### **Other Names**

Membrane-associated guanylate kinase, WW and PDZ domain-containing protein 1, Atrophin-1-interacting protein 3, AIP-3, BAI1-associated protein 1, BAP-1, Membrane-associated guanylate kinase inverted 1, MAGI-1, Trinucleotide repeat-containing gene 19 protein, WW domain-containing protein 3, WWP3, MAGI1, AIP3, BAIAP1, BAP1, TNRC19

### Target/Specificity

Widely expressed with the exception of skeletal muscle. Isoform 1, isoform 2 and isoform 6 are highly expressed in colon, kidney, lung, liver, and pancreas. Isoform 5 is predominantly expressed in brain and heart. Isoform 3 and isoform 4 are highly expressed in pancreas and brain.

#### **Dilution**

 $< span class = "dilution_WB">WB~~1:1000</span>< br \>< span class = "dilution_IHC-P">IHC-P~~N/A</span>< br \>< span class = "dilution_IHC-F">IHC-F~~N/A</span>< br \>< span class = "dilution_IF">IF~~1:50~200</span>< br \>< span class = "dilution_ICC">ICC~~N/A</span>< br \>< span class = "dilution_E">E~~N/A</span>< span class = "dilution_E">E~~N/A</span$ 

#### Storage

Store at -20  $^{\circ}$ 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  $^{\circ}$ C.

### **MAGI1 Polyclonal Antibody - Protein Information**

#### Name MAGI1

Synonyms AIP3, BAIAP1, BAP1, TNRC19

## **Function**

Plays a role in coupling actin fibers to cell junctions in endothelial cells, via its interaction with AMOTL2 and CDH5 (By similarity). May regulate acid-induced ASIC3 currents by modulating its expression at the cell surface (By similarity).

#### **Cellular Location**

Cell junction, tight junction. Cell membrane; Peripheral membrane protein. Note=Localizes to epithelial cells tight junctions

### **Tissue Location**

Widely expressed with the exception of skeletal muscle. Isoform 1, isoform 2 and isoform 6 are highly expressed in colon, kidney, lung, liver, and pancreas. Isoform 5 is predominantly expressed in brain and heart. Isoform 3 and isoform 4 are highly expressed in pancreas and brain.

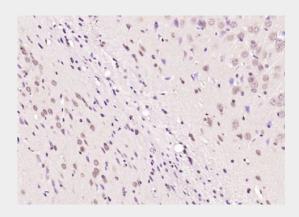


## **MAGI1 Polyclonal Antibody - Protocols**

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

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

# **MAGI1 Polyclonal Antibody - Images**



Paraformaldehyde-fixed, paraffin embedded (rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (MAGI1) Polyclonal Antibody, Unconjugated (bs-11352R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.