

## DESCRIPTION

<b>Species Reactivity</b>	Human/Mouse
<b>Specificity</b>	Detects human MAGI2 in direct ELISAs and Western blots. In direct ELISAs, less than 1% cross-reactivity with recombinant ARIP-2 is observed.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human MAGI2 Ser2-Arg130 Accession # Q86UL8
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

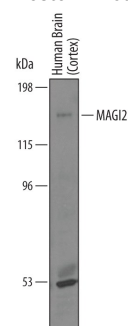
## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	1 µg/mL	See Below
<b>Immunocytochemistry</b>	5-15 µg/mL	See Below
<b>Immunohistochemistry</b>	5-15 µg/mL	See Below

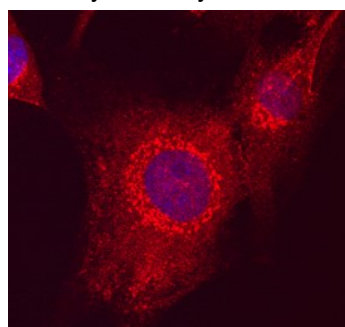
## DATA

### Western Blot



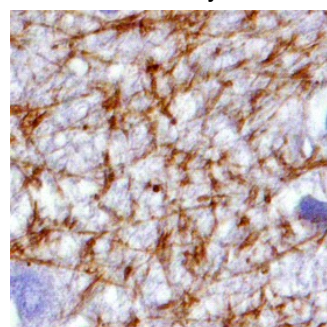
**Detection of Human MAGI2 by Western Blot.** Western blot shows lysates of human brain (cortex) tissue. PVDF membrane was probed with 1 µg/mL of Goat Anti-Human MAGI2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF7117) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF019). A specific band was detected for MAGI2 at approximately 170 kDa (as indicated). This experiment was conducted under reducing conditions and using [Immunoblot Buffer Group 1](#).

### Immunocytochemistry



**MAGI2 in U-87 MG Human Cell Line.** MAGI2 was detected in immersion fixed U-87 MG human glioblastoma/astrocytoma cell line using Goat Anti-Human MAGI2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF7117) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (red; Catalog # NL001) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

### Immunohistochemistry



**MAGI2 in Human Brain.** MAGI2 was detected in immersion fixed paraffin-embedded sections of human brain (hippocampus) using Goat Anti-Human MAGI2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF7117) at 15 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Goat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS008) and counterstained with hematoxylin (blue). Specific staining was localized to synaptic boutons and neuronal processes. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

## PREPARATION AND STORAGE

<b>Reconstitution</b>	Sterile PBS to a final concentration of 0.2 mg/mL.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

**BACKGROUND**

MAGI2 (AIP-1, ACVRINP1 also known as Activin receptor-interacting protein 1 and S-SCAM in rodents); is a 160-180 kDa member of the MAGUK family of proteins. It is found in neuronal post-synaptic membrane complexes, and serves as a molecular scaffold for multiple proteins, including  $\alpha$ -actinin, dendrin, SMAD3 and  $\beta$ -catenin. ARIP-1 facilitates the signaling of both growth factor and neurotransmitter receptors such as ActRIIA, NMDA and  $\beta_1$ -adrenergic receptors. Human ARIP-1 is 1455 amino acids (aa) in length. It contains an N-terminal PZD domain (aa 17-101), followed by a guanylate kinase-like domain (aa 109-283), two WW domains (aa 302-381) and five subsequent PZD domains (aa 426-1229). ARIP-1 is reported to dimerize/oligomerize. There are three potential isoform variants. All utilize an alternative start site at Met164 that may be accompanied by either an Arg substitution for aa 757-771, or a 48 aa substitution for aa 1236-1455. Over aa 2-130, human and mouse ARIP-1 are identical in aa sequence.