

DESCRIPTION

Species Reactivity	Human/Mouse
Specificity	Detects human MAGI2 in direct ELISAs and Western blots. In direct ELISAs, less than 1% cross-reactivity with recombinant ARIP-2 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human MAGI2 Ser2-Arg130 Accession # Q86UL8
Formulation	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.

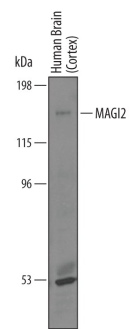
APPLICATIONS

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.

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

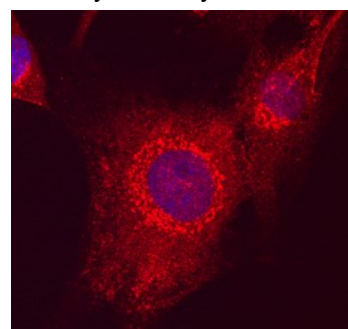
DATA

Western Blot



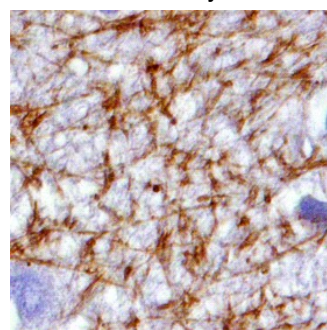
Detection of Human MAGI2 by Western Blot. Western blot shows lysates of human brain (cortex) tissue. PVDF membrane was probed with 1 µg/mL of Goat Anti-Human MAGI2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF7117) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF019). 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

Reconstitution	Sterile PBS to a final concentration of 0.2 mg/mL.
Shipping	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
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

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 α -actinin, dendrin, SMAD3 and β -catenin. ARIP-1 facilitates the signaling of both growth factor and neurotransmitter receptors such as ActRIIA, NMDA and β_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.