**BACKGROUND**

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-1α and MAGI-1β, 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.

**CHROMOSOMAL LOCATION**

Genetic locus: MAGI1 (human) mapping to 3p14.1; Magi1 (mouse) mapping to 6 D1.

**SOURCE**

MAGI-1 (SS-5) is a mouse monoclonal antibody raised against a partial recombinant protein mapping within amino acids 761-859 of MAGI-1 of human origin.

**PRODUCT**

Each vial contains 100 µg IgGκ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

**STORAGE**

Store at 4°C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**APPLICATIONS**

MAGI-1 (SS-5) is recommended for detection of MAGI-1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for MAGI-1 siRNA (h): sc-41999, MAGI-1 siRNA (m): sc-42000, MAGI-1 shRNA Plasmid (h): sc-41999-SH, MAGI-1 shRNA Plasmid (m): sc-42000-SH, MAGI-1 shRNA (h) Lentiviral Particles: sc-41999-V and MAGI-1 shRNA (m) Lentiviral Particles: sc-42000-V.

Molecular Weight of MAGI-1: 165 kDa.

Positive Controls: PC-12 cell lysate: sc-2250, mouse brain extract: sc-2253 or rat brain extract: sc-2392.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended:

1) Western Blotting: use m-IgGκ BP-HRP or m-IgGκ BP-HRP (Cruz Marker): sc-516102 or MAGI-1 (SS-5): sc-100326. Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).


**DATA**

MAGI-1 (SS-5): sc-100326. Western blot analysis of MAGI-1 expression in mouse brain (A) and rat brain (B) tissue extracts.

MAGI-1 (SS-5): sc-100326. Immunofluorescence staining of paraformaldehyde fixed HeLa cells showing membrane and cytoplasmic localization.

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

For research use only, not for use in diagnostic procedures.

**PROTOCOLS**

See our web site at www.scbt.com for detailed protocols and support products.