

Anti-Stathmin 1 STMN1 Rabbit Monoclonal Antibody

Catalog # ABO14029

Specification

Anti-Stathmin 1 STMN1 Rabbit Monoclonal Antibody - Product Information

Application WB, IHC, IF, ICC, IP, FC

Primary Accession
Host
Rabbit
Isotype
Rabbit IgG

Reactivity Rat, Human, Mouse

Clonality Monoclonal Format Liquid

Description

Anti-Stathmin 1 STMN1 Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF, IP, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat.

Anti-Stathmin 1 STMN1 Rabbit Monoclonal Antibody - Additional Information

Gene ID 3925

Other Names

Stathmin, Leukemia-associated phosphoprotein p18, Metablastin, Oncoprotein 18, Op18, Phosphoprotein p19, pp19, Prosolin, Protein Pr22, pp17, STMN1, Clorf215, LAP18, OP18

Calculated MW

17303 MW KDa

Application Details

WB 1:500-1:2000
IHC 1:50-1:100
ICC/IF 1:50-1:100
IP 1:
50
FC 1:50

Subcellular Localization

Cytoplasm, cytoskeleton.

Tissue Specificity

Ubiquitous. Expression is strongest in fetal and adult brain, spinal cord, and cerebellum, followed by thymus, bone marrow, testis, and fetal liver. Expression is intermediate in colon, ovary, placenta, uterus, and trachea, and is readily detected at substantially lower levels in all other tissues examined. Lowest expression is found in adult liver. Present in much greater abundance in cells from patients with acute leukemia of different subtypes than in normal peripheral blood lymphocytes, non-leukemic proliferating lymphoid cells, bone marrow cells, or cells from patients with chronic lymphoid or myeloid leukemia..

Contents

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen

A synthesized peptide derived from human Stathmin 1



PurificationAffinity-chromatography

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Anti-Stathmin 1 STMN1 Rabbit Monoclonal Antibody - Protein Information

Name STMN1

Synonyms Clorf215, LAP18, OP18

Function

Involved in the regulation of the microtubule (MT) filament system by destabilizing microtubules. Prevents assembly and promotes disassembly of microtubules. Phosphorylation at Ser-16 may be required for axon formation during neurogenesis. Involved in the control of the learned and innate fear (By similarity).

Cellular Location

Cytoplasm, cytoskeleton.

Tissue Location

Ubiquitous. Expression is strongest in fetal and adult brain, spinal cord, and cerebellum, followed by thymus, bone marrow, testis, and fetal liver. Expression is intermediate in colon, ovary, placenta, uterus, and trachea, and is readily detected at substantially lower levels in all other tissues examined. Lowest expression is found in adult liver. Present in much greater abundance in cells from patients with acute leukemia of different subtypes than in normal peripheral blood lymphocytes, non-leukemic proliferating lymphoid cells, bone marrow cells, or cells from patients with chronic lymphoid or myeloid leukemia.

Anti-Stathmin 1 STMN1 Rabbit Monoclonal 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
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

Anti-Stathmin 1 STMN1 Rabbit Monoclonal Antibody - Images



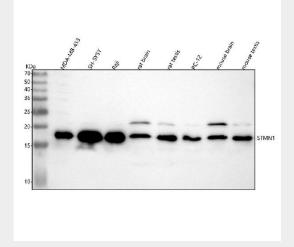


Figure 1. Western blot analysis of Stathmin 1 using anti-Stathmin 1 antibody (M00994). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human MDA-MB-453 whole cell lysates,

Lane 2: human SH-SY5Y whole cell lysates,

Lane 3: human Raji whole cell lysates,

Lane 4: rat brain tissue lysates,

Lane 5: rat testis tissue lysates,

Lane 6: rat PC-12 whole cell lysates,

Lane 7: mouse brain tissue lysates,

Lane 8: mouse testis tissue lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Stathmin 1 antigen affinity purified monoclonal antibody (Catalog # M00994) at 1:500 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:500 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for Stathmin 1 at approximately 17 kDa. The expected band size for Stathmin 1 is at 17 kDa.

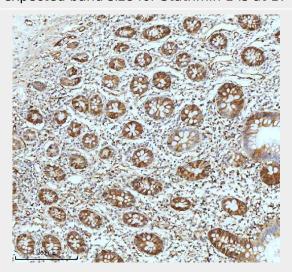


Figure 2. IHC analysis of STMN1 using anti-STMN1 antibody (M01194). STMN1 was detected in a paraffin-embedded section of human colon tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue



section was blocked with 10% goat serum. The tissue section was then incubated with 1:50 rabbit anti-STMN1 Antibody (M01194) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

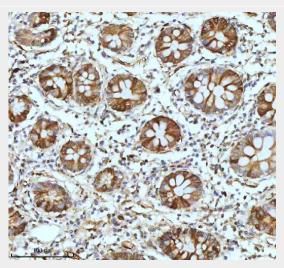


Figure 3. IHC analysis of STMN1 using anti-STMN1 antibody (M01194).

STMN1 was detected in a paraffin-embedded section of human colon tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1:50 rabbit anti-STMN1 Antibody (M01194) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

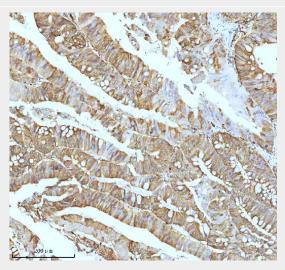


Figure 4. IHC analysis of STMN1 using anti-STMN1 antibody (M01194).

STMN1 was detected in a paraffin-embedded section of human colon cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1:50 rabbit anti-STMN1 Antibody (M01194) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.



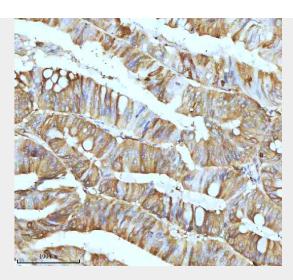


Figure 5. IHC analysis of STMN1 using anti-STMN1 antibody (M01194).

STMN1 was detected in a paraffin-embedded section of human colon cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1:50 rabbit anti-STMN1 Antibody (M01194) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

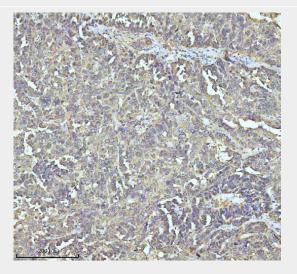


Figure 6. IHC analysis of STMN1 using anti-STMN1 antibody (M01194).

STMN1 was detected in a paraffin-embedded section of human ovarian cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1:50 rabbit anti-STMN1 Antibody (M01194) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.



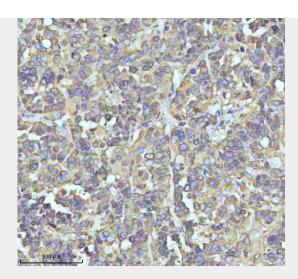


Figure 7. IHC analysis of STMN1 using anti-STMN1 antibody (M01194).

STMN1 was detected in a paraffin-embedded section of human ovarian cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1:50 rabbit anti-STMN1 Antibody (M01194) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

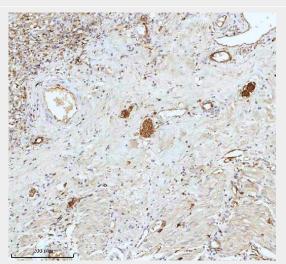


Figure 8. IHC analysis of STMN1 using anti-STMN1 antibody (M01194).

STMN1 was detected in a paraffin-embedded section of neuroplexus of human colon tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1:50 rabbit anti-STMN1 Antibody (M01194) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.



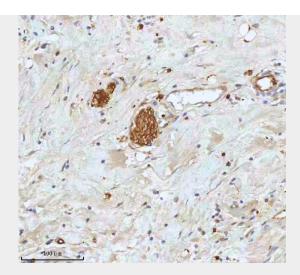


Figure 9. IHC analysis of STMN1 using anti-STMN1 antibody (M01194).

STMN1 was detected in a paraffin-embedded section of neuroplexus of human colon tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1:50 rabbit anti-STMN1 Antibody (M01194) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

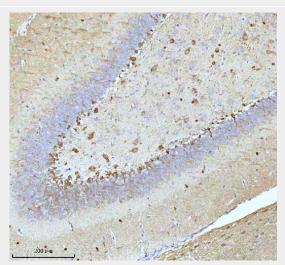


Figure 10. IHC analysis of STMN1 using anti-STMN1 antibody (M01194).

STMN1 was detected in a paraffin-embedded section of neuroplexus of rat brain tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1:50 rabbit anti-STMN1 Antibody (M01194) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.



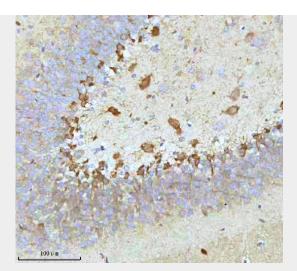


Figure 11. IHC analysis of STMN1 using anti-STMN1 antibody (M01194).

STMN1 was detected in a paraffin-embedded section of neuroplexus of rat brain tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1:50 rabbit anti-STMN1 Antibody (M01194) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

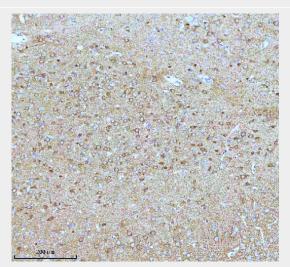


Figure 12. IHC analysis of STMN1 using anti-STMN1 antibody (M01194).

STMN1 was detected in a paraffin-embedded section of neuroplexus of rat brain tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1:50 rabbit anti-STMN1 Antibody (M01194) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.



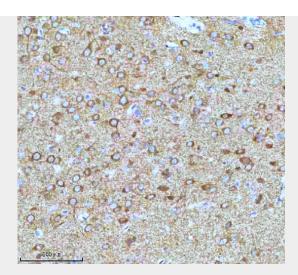


Figure 13. IHC analysis of STMN1 using anti-STMN1 antibody (M01194). STMN1 was detected in a paraffin-embedded section of neuroplexus of rat brain tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1:50 rabbit anti-STMN1 Antibody (M01194) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.