

MALT1 (K-20): sc-33953

BACKGROUND

Mucosa associated lymphoid tissue lymphoma translocation gene 1 (MALT1) is found in extranodal low-grade B cell lymphomas. MALT1 encodes two Ig-like C2-type domains and fuses with an API2 gene, which is highly expressed in adult lymphoid tissue. The translocation of this MALT1 gene, which maps to human chromosome 18q21.32, and the apoptosis-inhibiting API2 gene results in an increased development of MALT lymphomas and apoptosis inhibition. Sites at which this API2-MALT1 (11;18)(q21;q21) translocation commonly occurs are within human lung and kidney tissue. MALT lymphoma expresses nuclear Bcl10, which mediates the oligomerization and activation of a MALT1 caspase-like domain. The MALT1-API2 fusion protein activates NF κ B and creates a signaling pathway, which is influenced by this Bcl10-MALT1 complex. MALT1 mRNA is found in pre-B cells, mature B cells and plasma cells.

REFERENCES

1. Akagi, T., et al. 1999. A novel gene, MALT1 at 18q21, is involved in t(11;18)(q21;q21) found in low-grade B-cell lymphoma of mucosa-associated lymphoid tissue. *Oncogene* 18: 5785-5794.
2. Dierlamm, J., et al. 1999. The apoptosis inhibitor gene API2 and a novel 18q gene, MLT, are recurrently rearranged in the t(11;18)(q21;q21)p6 associated with mucosa-associated lymphoid tissue lymphomas. *Blood* 93: 3601-3609.
3. Uren, A.G., et al. 2000. Identification of paracaspases and metacaspases: two ancient families of caspase-like proteins, one of which plays a key role in MALT lymphoma. *Mol. Cell* 6: 961-967.
4. Stoffel, A., et al. 2001. The API2/MALT1 fusion product may lead to germinal center B cell lymphomas by suppression of apoptosis. *Hum. Hered.* 51: 1-7.
5. Liu, H., et al. 2001. t(11;18)(q21;q21) is associated with advanced mucosa-associated lymphoid tissue lymphoma that expresses nuclear Bcl10. *Blood* 98: 1182-1187.
6. Inagaki, H., et al. 2001. API2-MALT1 fusion transcripts involved in mucosa-associated lymphoid tissue lymphoma: multiplex RT-PCR detection using formalin-fixed paraffin-embedded specimens. *Am. J. Pathol.* 158: 699-706.

CHROMOSOMAL LOCATION

Genetic locus: MALT1 (human) mapping to 18q21.32; Malt1 (mouse) mapping to 18 E1.

SOURCE

MALT1 (K-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of MALT1 of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-33953 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

MALT1 (K-20) is recommended for detection of MALT1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

MALT1 (K-20) is also recommended for detection of MALT1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for MALT1 siRNA (h): sc-35845, MALT1 siRNA (m): sc-35846, MALT1 shRNA Plasmid (h): sc-35845-SH, MALT1 shRNA Plasmid (m): sc-35846-SH, MALT1 shRNA (h) Lentiviral Particles: sc-35845-V and MALT1 shRNA (m) Lentiviral Particles: sc-35846-V.

Molecular Weight of MALT1: 93 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, RAW 264.7 whole cell lysate: sc-2211 or Daudi cell lysate: sc-2415.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

STORAGE

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

RESEARCH USE

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

PROTOCOLS

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



Try **MALT1 (D-1): sc-515389** or **MALT1 (B-12): sc-46677**, our highly recommended monoclonal alternatives to MALT1 (K-20). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **MALT1 (D-1): sc-515389**.