

MALT1 (D-1): sc-515389

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) associated with mucosa associated lymphoid tissue lymphomas. *Blood* 93: 3601-3609.

CHROMOSOMAL LOCATION

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

SOURCE

MALT1 (D-1) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 42-57 near the N-terminus of MALT1 of human origin.

PRODUCT

Each vial contains 200 μ g IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

MALT1 (D-1) is available conjugated to agarose (sc-515389 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-515389 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515389 PE), fluorescein (sc-515389 FITC), Alexa Fluor[®] 488 (sc-515389 AF488), Alexa Fluor[®] 546 (sc-515389 AF546), Alexa Fluor[®] 594 (sc-515389 AF594) or Alexa Fluor[®] 647 (sc-515389 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-515389 AF680) or Alexa Fluor[®] 790 (sc-515389 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-515389 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

Alexa Fluor[®] is a trademark of Molecular Probes, Inc., Oregon, USA

STORAGE

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

APPLICATIONS

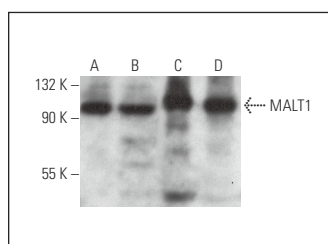
MALT1 (D-1) is recommended for detection of MALT1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (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 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.

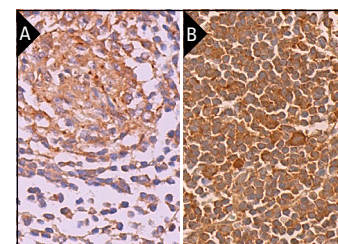
Molecular Weight of MALT1: 93 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Hep G2 cell lysate: sc-2227 or WEHI-231 whole cell lysate: sc-2213.

DATA



MALT1 (D-1): sc-515389. Western blot analysis of MALT1 expression in HeLa (A), Hep G2 (B), WEHI-231 (C) and NRK (D) whole cell lysates.



MALT1 (D-1): sc-515389. Immunoperoxidase staining of formalin fixed, paraffin-embedded human lymph node tissue (A) and human tonsil tissue (B) showing cytoplasmic staining of cells in germinal center and cells in non-germinal center.

SELECT PRODUCT CITATIONS

1. Monajemi, M., et al. 2018. MALT1 blocks IL-1 β production by macrophages *in vitro* and limits dextran sodium sulfate-induced intestinal inflammation *in vivo*. *J. Leukoc. Biol.* 104: 557-572.
2. Wang, Z., et al. 2019. Coordinated regulation of scaffold opening and enzymatic activity during CARD11 signaling. *J. Biol. Chem.* 294: 14648-14660.

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.