

MALT1 (B-12): sc-46677

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 t(11;18)(q21;q21) translocation commonly occurs are within human lung and kidney tissue. MALT lymphoma expresses nuclear Bcl-10, which mediates the oligomerization and activation of a MALT1 caspase-like domain. The MALT1/API2 fusion protein activates NFκB and creates a signaling pathway, which is influenced by this Bcl-10/MALT1 complex. MALT1 mRNA is found in pre-B cells, mature B cells and plasma cells.

CHROMOSOMAL LOCATION

Genetic locus: MALT1 (human) mapping to 18q21.32.

SOURCE

MALT1 (B-12) is a mouse monoclonal antibody raised against amino acids 525-824 of MALT1 of human origin.

PRODUCT

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

MALT1 (B-12) is available conjugated to either Alexa Fluor® 546 (sc-46677 AF546) or Alexa Fluor® 594 (sc-46677 AF594), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-46677 AF680) or Alexa Fluor® 790 (sc-46677 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

MALT1 (B-12) is recommended for detection of MALT1 of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:10000), 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), 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 shRNA Plasmid (h): sc-35845-SH and MALT1 shRNA (h) Lentiviral Particles: sc-35845-V.

Molecular Weight of MALT1: 93 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, Hep G2 cell lysate: sc-2227 or HeLa whole cell lysate: sc-2200.

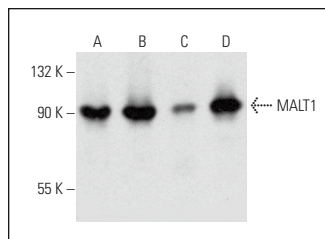
STORAGE

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

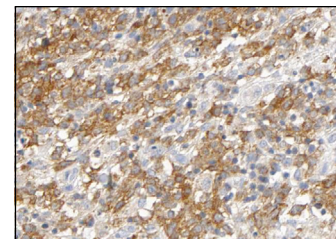
RESEARCH USE

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

DATA



MALT1 (B-12): sc-46677. Western blot analysis of MALT1 expression in Jurkat (A), HeLa (B), AML-193 (C) and Hep G2 (D) whole cell lysates.



MALT1 (B-12): sc-46677. Immunoperoxidase staining of formalin fixed, paraffin-embedded human malignant lymphoma showing membrane staining of tumor cells. Kindly provided by The Swedish Human Protein Atlas (HPA) program.

SELECT PRODUCT CITATIONS

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- Borthakur, A., et al. 2013. *Lactobacillus acidophilus* alleviates platelet-activating factor-induced inflammatory responses in human intestinal epithelial cells. *PLoS ONE* 8: e75664.
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- Schlauderer, F., et al. 2018. Molecular architecture and regulation of BCL10-MALT1 filaments. *Nat. Commun.* 9: 4041.
- Jacobs, K.A., et al. 2019. Paracaspase MALT1 regulates glioma cell survival by controlling endo-lysosome homeostasis. *EMBO J.* 39: e102030.
- Bao, W., et al. 2020. Targeting BCL10 by small peptides for the treatment of B cell lymphoma. *Theranostics* 10: 11622-11636.
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PROTOCOLS

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