SANTA CRUZ BIOTECHNOLOGY, INC.

MALT1 (clone 50): sc-130494

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 NFκB 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 (clone 50) is a mouse monoclonal antibody raised against recombinant MALT1 of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

MALT1 (clone 50) 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 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 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.

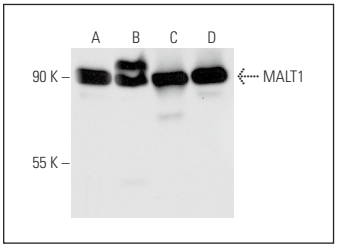
Molecular Weight of MALT1: 93 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, HeLa whole cell lysate: sc-2200 or Daudi cell lysate: sc-2415.

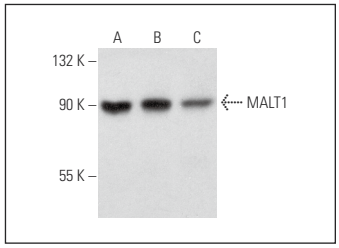
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



MALT1 (clone 50): sc-130494. Western blot analysis of MALT1 expression in Jurkat (**A**), Daudi (**B**), HeLa (**C**) and U68MG (**D**) whole cell lysates.



MALT1 (clone 50): sc-130494. Western blot analysis of MALT1 expression in Hep G2 (**A**), CCRF-CEM (**B**) and AML-193 (**C**) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Maubach, G., et al. 2013. Ca^{2+}/calmodulin-dependent kinase II contributes to inhibitor of nuclear factor-κB kinase complex activation in *Helicobacter pylori* infection. Int. J. Cancer 133: 1507-1512.
2. Xu, X., et al. 2018. $CARD9^{S12N}$ facilitates the production of IL-5 by alveolar macrophages for the induction of type 2 immune responses. Nat. Immunol. 19: 547-560.
3. Andoh, T., et al. 2021. Berberine induces anti-atopic dermatitis effects through the downregulation of cutaneous EIF3F and MALT1 in NC/Nga mice with atopy-like dermatitis. Biochem. Pharmacol. 185: 114439.
4. Qin, H., et al. 2021. MALT-1 inhibition attenuates the inflammatory response of ankylosing spondylitis by targeting NFκB activation. Injury 52: 1287-1293.

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.

CONJUGATES

See **MALT1 (D-1): sc-515389** for MALT1 antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.