

MALT1 (MALT-Lymphoma Marker) Antibody - With BSA and Azide

Mouse Monoclonal Antibody [Clone SPM578] Catalog # AH10401

Product Information

Application WB, IF, FC, IHC-P

Primary Accession Q9UDY8
Other Accession 10892, 601217
Reactivity Human

Host Mouse Clonality Monoclonal

Isotype Mouse / IgG1, kappa

Clone Names SPM578 Calculated MW 92272

Additional Information

Gene ID 10892

Other Names Mucosa-associated lymphoid tissue lymphoma translocation protein 1,

3.4.22.-, MALT lymphoma-associated translocation, Paracaspase, MALT1, MLT

Application Note WB~~1:1000 IF~~1:50~200 FC~~1:10~50 IHC-P~~N/A

Format 200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G.

Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available

WITHOUT BSA & azide at 1.0mg/ml.

Storage Store at 2 to 8°C.Antibody is stable for 24 months.

Precautions MALT1 (MALT-Lymphoma Marker) Antibody - With BSA and Azide is for

research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name MALT1 {ECO:0000303|PubMed:10523859, ECO:0000312|HGNC:HGNC:6819}

Function Protease that enhances BCL10-induced activation: acts via formation of CBM

complexes that channel adaptive and innate immune signaling downstream of CARD domain-containing proteins (CARD9, CARD11 and CARD14) to activate NF-kappa-B and MAP kinase p38 pathways which stimulate expression of

genes encoding pro-inflammatory cytokines and chemokines

(PubMed:<u>11262391</u>, PubMed:<u>18264101</u>, PubMed:<u>24074955</u>). Mediates BCL10 cleavage: MALT1-dependent BCL10 cleavage plays an important role in T-cell

antigen receptor-induced integrin adhesion (PubMed: 11262391,

PubMed: 18264101). Involved in the induction of T helper 17 cells (Th17) differentiation (PubMed: 11262391, PubMed: 18264101). Cleaves RC3H1 and ZC3H12A in response to T-cell receptor (TCR) stimulation which releases their cooperatively repressed targets to promote Th17 cell differentiation (By similarity). Also mediates cleavage of N4BP1 in T-cells following TCR-mediated activation, leading to N4BP1 inactivation (PubMed: 31133753). May also have ubiquitin ligase activity: binds to TRAF6, inducing TRAF6 oligomerization and activation of its ligase activity (PubMed: 14695475).

Cellular Location

Cytoplasm, perinuclear region. Nucleus Note=Shuttles between the nucleus and cytoplasm. Found in perinuclear structures together with BCL10.

Tissue Location

Highly expressed in peripheral blood mononuclear cells. Detected at lower levels in bone marrow, thymus and lymph node, and at very low levels in colon and lung

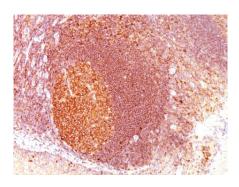
Background

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, 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. MALT1 mRNA is found in pre-B cells, mature B cells and plasma cells.

References

Ye H et. al. | Pathol 2005; 205: 293-301

Images



Formalin-fixed, paraffin-embedded human Tonsil stained with MALT1 Monoclonal Antibody (SPM578)

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.