10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-MALT1 Antibody

Catalog # ABO11223

Product Information

Application	WB
Primary Accession	Q9UDY8
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Mucosa-associated lymphoid tissue lymphoma translocation protein 1(MALT1) detection. Tested with WB in Human.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

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
Calculated MW	92272
Application Details	Western blot, 0.1-0.5 □g/ml, Human
Subcellular Localization	Cytoplasm, perinuclear region . Nucleus . Shuttles between the nucleus and cytoplasm. Found in perinuclear structures together with BCL10.
Tissue Specificity	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.
Source	Eukaryota
Protein Name	Mucosa-associated lymphoid tissue lymphoma translocation protein 1
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human MALT1(809-824aa DEIPFSFSDRLRISEK).
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins

Storage	At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.
Sequence Similarities	Belongs to the peptidase C14B family.

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:11262391, PubMed:18264101, PubMed:24074955). 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

MALT1(Mucosa-associated lymphoid tissue lymphoma translocation protein 1), also called MLT or PARACASPASE, is a protein that in humans is encoded by the MALT1 gene. This gene has been found to be recurrently rearranged in chromosomal translocation with two other genes - baculoviral IAP repeat-containing protein 3(also known as apoptosis inhibitor 2) and immunoglobulin heavy chain locus - in mucosa-associated lymphoid tissue lymphomas. Dierlamm et al.(1999) and Akagi et al.(1999) mapped the MALT1 gene to chromosome 18q21. Using mouse models, Ruland et al.(2003) demonstrated that MALT1 is essential for T-cell activation, proliferation, and IL2 production in response to T-cell receptor ligation and strictly required for signal-specific NF-kappa-B(NFKB) activation induced by the T-cell receptor but not TNF-alpha or IL1 signaling. MALT1 operates downstream of BCL10, controls the catalytic activity of the canonical I-kappa-B kinase complex, and regulates the signaling of JNK and p38 MAP kinases.

Images

Anti-MALT1 antibody, ABO11223, Western blottingLane 1: MCF-7 Cell LysateLane 2: HELA Cell Lysate



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