

CD247 Monoclonal Antibody(4B10)

Catalog No: YM0114

Reactivity: Human

Applications: WB;IHC;IF;FCM;ELISA

Target: CD247

Fields: >>Natural killer cell mediated cytotoxicity;>>Th1 and Th2 cell

differentiation;>>Th17 cell differentiation;>>T cell receptor signaling pathway;>>Chagas disease;>>Epstein-Barr virus infection;>>Human

immunodeficiency virus 1 infection;>>PD-L1 expression and PD-1 checkpoint

pathway in cancer

Gene Name: CD247

Protein Name: T-cell surface glycoprotein CD3 zeta chain

P20963

Human Gene Id: 919

Human Swiss Prot

No:

Mouse Swiss Prot P24161

No:

Immunogen: Purified recombinant fragment of human CD247 expressed in E. Coli.

Specificity: CD247 Monoclonal Antibody detects endogenous levels of CD247 protein.

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Monoclonal, Mouse

Dilution: WB 1:500 - 1:2000. IHC 1:200 - 1:1000. IF 1:200 - 1:1000. Flow cytometry:

1:200 - 1:400. ELISA: 1:10000. Not yet tested in other applications.

Purification : Affinity purification

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight: 19kD

Cell Pathway: Natural killer cell mediated cytotoxicity; T_Cell_Receptor;

P References : 1. J Immunol. 2002 Aug 15;169(4):1705-12.

2. Arthritis Rheum. 2003 Jul;48(7):1948-55.

3. Nat Methods. 2005 Aug;2(8):591-8.

Background: The protein encoded by this gene is T-cell receptor zeta, which together with T-

cell receptor alpha/beta and gamma/delta heterodimers, and with CD3-gamma, -delta and -epsilon, forms the T-cell receptor-CD3 complex. The zeta chain plays an important role in coupling antigen recognition to several intracellular signal-transduction pathways. Low expression of the antigen results in impaired immune response. Two alternatively spliced transcript variants encoding distinct isoforms

have been found for this gene. [provided by RefSeq, Jul 2008],

Function: disease:Defects in CD247 are a cause of primary T-cell immunodeficiency

[MIM:610163]. Affected individuals suffer of recurrent infections. Patients T-cell counts are very low and B-cell counts are normal.,domain:The ITAM domains mediate interaction with SHB.,function:Probable role in assembly and expression of the TCR complex as well as signal transduction upon antigen triggering.,online information:CD247 mutation db,PTM:Phosphorylated on Tyr residues after T-cell

receptor triggering., similarity: Belongs to the CD3Z/FCER1G

family., similarity: Contains 3 ITAM domains., subunit: The TCR/CD3 complex of T-

lymphocytes consists of either a TCR alpha/beta or TCR gamma/delta

heterodimer coexpressed at the cell surface with the invariant subunits of CD3 labeled gamma, delta, epsilon, zeta, and eta. CD3-zeta forms either homodimers

or heterodimers with CD3-eta. Interacts with SLA and SLA2. Interacts w

Subcellular Location:

Cell membrane ; Single-pass type I membrane protein.

Expression: CD3Z is expressed in normal lymphoid tissue and in peripheral blood

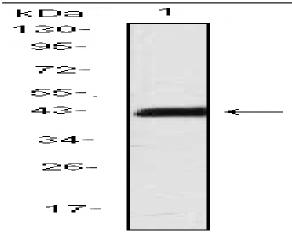
mononuclear cells (PBMCs) (PubMed:11722641).

Tag: hot

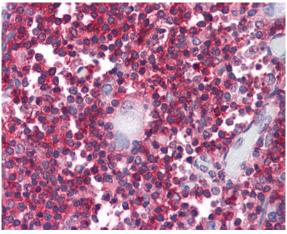
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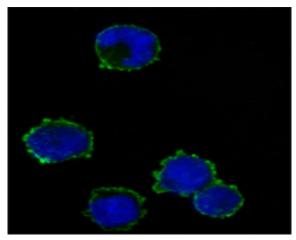
Products Images



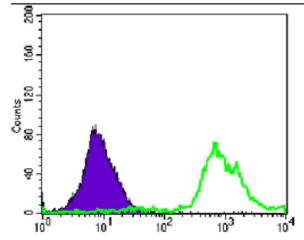
Western Blot analysis using CD247 Monoclonal Antibody against CD247-hlgGFc transfected HEK293 cell lysate.



Immunohistochemistry analysis of paraffin-embedded human Thymus tissues with AEC staining using CD247 Monoclonal Antibody.



Immunofluorescence analysis of K562 cells using CD247 Monoclonal Antibody (green). Blue: DRAQ5 fluorescent DNA dye.



Flow cytometric analysis of Jurkat cells using CD247 Monoclonal Antibody (green) and negative control (purple).