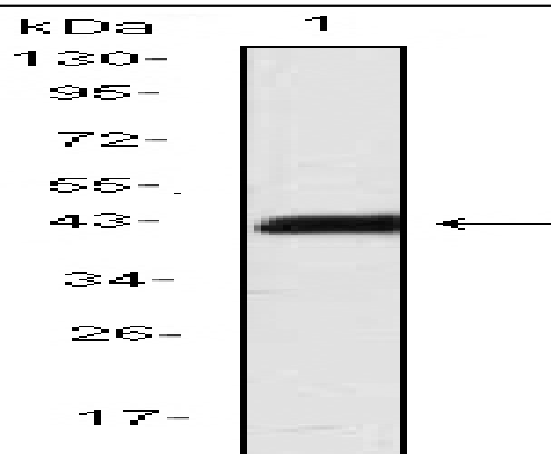


## CD247 Monoclonal Antibody(4B10)

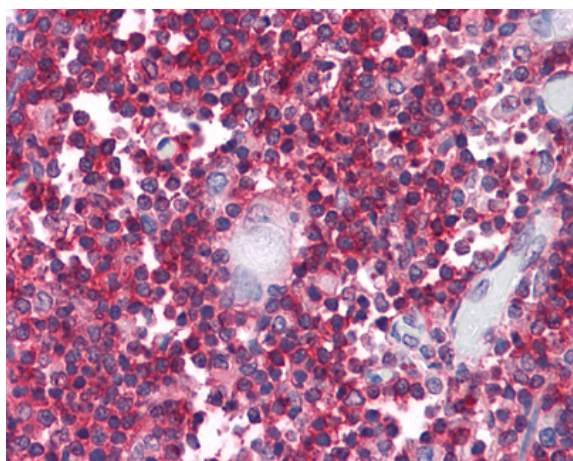
<b>Catalog No :</b>	YM0114
<b>Reactivity :</b>	Human
<b>Applications :</b>	WB;IHC;IF;FCM;ELISA
<b>Target :</b>	CD247
<b>Fields :</b>	>>Natural killer cell mediated cytotoxicity;>>Th1 and Th2 cell differentiation;>>Th17 cell differentiation;>>T cell receptor signaling pathway;>>Chagas disease;>>Epstein-Barr virus infection;>>Human immunodeficiency virus 1 infection;>>PD-L1 expression and PD-1 checkpoint pathway in cancer
<b>Gene Name :</b>	CD247
<b>Protein Name :</b>	T-cell surface glycoprotein CD3 zeta chain
<b>Human Gene Id :</b>	919
<b>Human Swiss Prot No :</b>	P20963
<b>Mouse Swiss Prot No :</b>	P24161
<b>Immunogen :</b>	Purified recombinant fragment of human CD247 expressed in E. Coli.
<b>Specificity :</b>	CD247 Monoclonal Antibody detects endogenous levels of CD247 protein.
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Monoclonal, Mouse
<b>Dilution :</b>	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.
<b>Purification :</b>	Affinity purification
<b>Storage Stability :</b>	-15°C to -25°C/1 year(Do not lower than -25°C)

<b>Molecularweight :</b>	19kD
<b>Cell Pathway :</b>	Natural killer cell mediated cytotoxicity;T_Cell_Receptor;
<b>P References :</b>	<ol style="list-style-type: none"> <li>1. J Immunol. 2002 Aug 15;169(4):1705-12.</li> <li>2. Arthritis Rheum. 2003 Jul;48(7):1948-55.</li> <li>3. Nat Methods. 2005 Aug;2(8):591-8.</li> </ol>
<b>Background :</b>	<p>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],</p>
<b>Function :</b>	<p>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</p>
<b>Subcellular Location :</b>	Cell membrane ; Single-pass type I membrane protein.
<b>Expression :</b>	CD3Z is expressed in normal lymphoid tissue and in peripheral blood mononuclear cells (PBMCs) (PubMed:11722641).

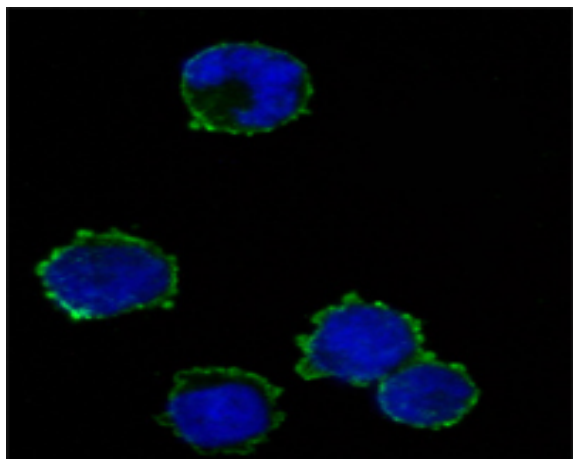
## Products Images



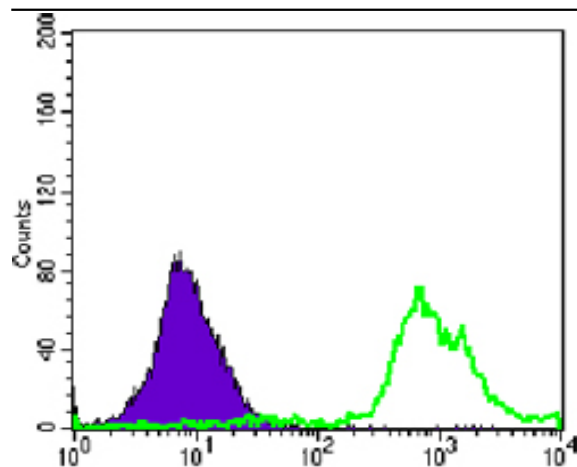
Western Blot analysis using CD247 Monoclonal Antibody against CD247-hlgGfc transfected HEK293 cell lysate.



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).