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Rabbit Anti-CD79A antibody

SL10480R

Product Name:	CD79A
Chinese Name:	CD79A抗体
Alias:	B lymphocyte-specific MB1 protein; B-cell antigen receptor complex-associated protein alpha chain; CD 79a; CD79a; CD79a antigen (immunoglobulin-associated alpha); CD79A antigen; CD79a molecule, immunoglobulin-associated alpha; CD79A_HUMAN; Ig alpha; Ig-alpha; IGA; IgM-alpha; Immunoglobulin-associated alpha; Ly54; MB-1 membrane glycoprotein; MB1; Membrane-bound immunoglobulin-associated protein; Surface IgM-associated protein.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Horse,Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	22kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human CD79A:101-226/226
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	The B lymphocyte antigen receptor is a multimeric complex that includes the antigen-specific component, surface immunoglobulin (Ig). Surface Ig non-covalently associates with two other proteins, Ig-alpha and Ig-beta, which are necessary for expression and

function of the B-cell antigen receptor. This gene encodes the Ig-alpha protein of the B-cell antigen component. Alternatively spliced transcript variants encoding different isoforms have been described. [provided by RefSeq, Jul 2008].

Function:
Required in cooperation with CD79B for initiation of the signal transduction cascade activated by binding of antigen to the B-cell antigen receptor complex (BCR) which leads to internalization of the complex, trafficking to late endosomes and antigen presentation. Also required for BCR surface expression and for efficient differentiation of pro- and pre-B-cells. Stimulates SYK autophosphorylation and activation. Binds to BLNK, bringing BLNK into proximity with SYK and allowing SYK to phosphorylate BLNK. Also interacts with and increases activity of some Src-family tyrosine kinases. Represses BCR signaling during development of immature B-cells.

Subunit:
Heterodimer of alpha and beta chains; disulfide-linked. Part of the B-cell antigen receptor complex where the alpha/beta chain heterodimer is non-covalently associated with an antigen-specific membrane-bound surface immunoglobulin of two heavy chains and two light chains. Interacts through its phosphorylated ITAM domain with the SH2 domains of SYK which stimulates SYK autophosphorylation and activation. Also interacts, when phosphorylated on Tyr-210, with the SH2 domain of BLNK/SLP65, bringing BLNK into proximity with SYK and allowing SYK to phosphorylate BLNK which is necessary for trafficking of the BCR to late endosomes. Interacts with Src-family tyrosine kinases including FYN and LYN, increasing their activity.

Subcellular Location:
Cell membrane; Single-pass type I membrane protein. Note=Following antigen binding, the BCR has been shown to translocate from detergent-soluble regions of the cell membrane to lipid rafts although signal transduction through the complex can also occur outside lipid rafts.

Tissue Specificity:
B-cells.

Post-translational modifications:
Phosphorylated on tyrosine, serine and threonine residues upon B-cell activation. Phosphorylation of tyrosine residues by Src-family kinases is an early and essential feature of the BCR signaling cascade. The phosphorylated tyrosines serve as docking sites for SH2-domain containing kinases, leading to their activation which in turn leads to phosphorylation of downstream targets. Phosphorylated by LYN. Phosphorylation of serine and threonine residues may prevent subsequent tyrosine phosphorylation. Arginine methylation in the ITAM domain may interfere with the binding of SYK. It promotes signals leading to B cell differentiation.

DISEASE:
Agammaglobulinemia 3 (AGM3) [MIM:613501]: A primary immunodeficiency

characterized by profoundly low or absent serum antibodies and low or absent circulating B cells due to an early block of B-cell development. Affected individuals develop severe infections in the first years of life. Note=The disease is caused by mutations affecting the gene represented in this entry. Two different mutations, one at the splice donor site of intron 2 and the other at the splice acceptor site for exon 3, have been identified. Both mutations give rise to a truncated protein.

Similarity:
Contains 1 Ig-like C2-type (immunoglobulin-like) domain.
Contains 1 ITAM domain.

SWISS:
P11912

Gene ID:
973

Database links:

Entrez Gene: 973Human

Entrez Gene: 12518Mouse

Entrez Gene: 681236Rat

Omim: 112205Human

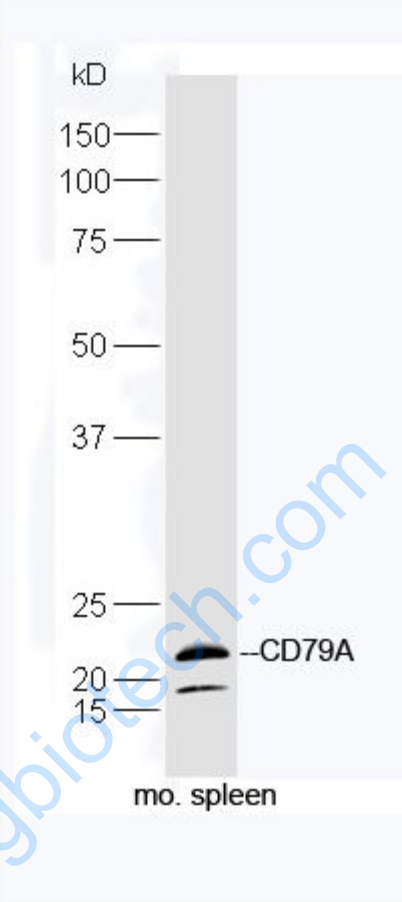
SwissProt: P11912Human

SwissProt: P11911Mouse

Unigene: 631567Human

Unigene: 1355Mouse

Important Note:
This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Picture:	 Protein: spleen(mouse) lysate at 40ug; Primary: rabbit Anti-CD79A (SL10480R) at 1:300; Secondary: HRP conjugated Goat-Anti-rabbit IgG(SL10480R) at 1: 5000; Predicted band size: 22 kD Observed band size: 22 kD