

30-1528: Anti-CD79a Monoclonal Antibody (Clone:HM47) Purified

Clonality :	Monoclonal
Clone Name :	HM47
Application :	FACS
Reactivity :	Human
Gene :	CD79A
Gene ID :	973
Uniprot ID :	P11912
Format :	Purified
Alternative Name :	CD79A,IGA,MB1
Isotype :	Mouse IgG1
Immunogen Information :	Synthetic peptide corresponding to C terminal amino acids 208-222 of human CD79a

Description

CD79a (Ig alpha, MB1) forms disulfide-linked heterodimer with CD79b (Ig beta). They both are transmembrane proteins with extended cytoplasmic domains containing immunoreceptor tyrosine activation motives (ITAMs), and together with cell surface immunoglobulin they constitute B-cell antigen-specific receptor (BCR). CD79a and b are the first components of BCR that are expressed developmentally. They appear on pro-B cells in association with the endoplasmic reticulum chaperone calnexin. Subsequently, in pre-B cells, CD79 heterodimer is associated with lambda5-VpreB surrogate immunoglobulin and later with antigen-specific surface immunoglobulins. At the plasma cell stage, CD79a is present as an intracellular component. CD79a/b complex interacts with Src-family tyrosine kinase Lyn, which phosphorylates its cytoplasmic ITAM motives to form docking sites for downstream signaling.

Product Info

Amount :	0.1 mg
Purification :	Purified by protein-A affinity chromatography
Storage condition :	Store at 2-8°C. Do not freeze.

Application Note

Flow Cytometry *Application note:* intracellular staining
Immunoprecipitation Western Blotting Immunohistochemistry

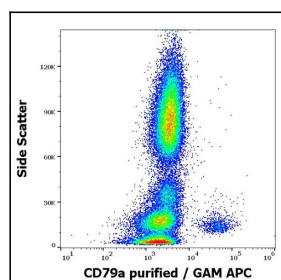


Figure 1: Flow cytometry intracellular staining pattern of human peripheral whole blood stained using anti-human CD79a (HM47) purified antibody (GAM APC).

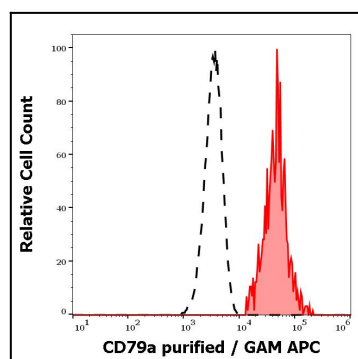


Figure 2: Separation of human CD79a positive lymphocytes (red-filled) from neutrophil granulocytes (black-dashed) in flow cytometry analysis (intracellular staining) of human peripheral whole blood stained using anti-human CD79a (HM47) purified antibody (GAM APC).

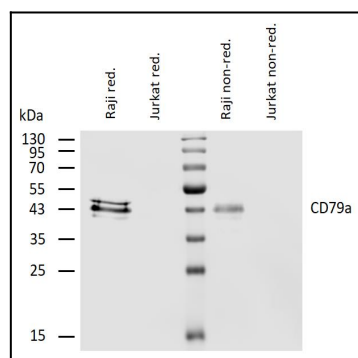


Figure 3: Western blotting analysis of human CD79a using mouse monoclonal antibody HM47 on lysates of Raji and Jurkat (negative control) cell line under reducing and non-reducing conditions. Nitrocellulose membrane was probed with 2 µg/ml of mouse anti-CD79a monoclonal antibody followed by IRDye800-conjugated anti-mouse secondary antibody. CD79a was detected around 43 kDa.