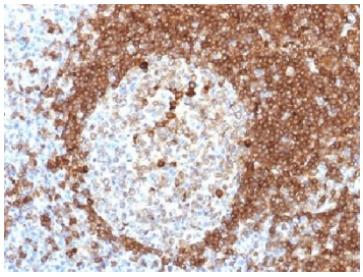
CD79a Antibody [clone HM57] (V3279)

Catalog No.	Formulation	Size
V3279-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3279-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3279SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

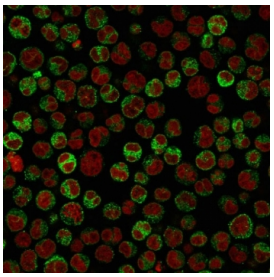
Citations (20)

Bulk quote request

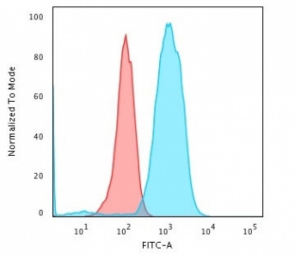
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	HM57
Purity	Protein G affinity chromatography
UniProt	P11912
Localization	Cell surface, cytoplasmic
Applications	Western Blot : 1-2ug/ml Flow Cytometry : 1-2ug/10^6 cells Immunofluorescence : 1-2ug/ml Immunohistochemistry (FFPE) : 0.25-0.5ug/ml for 30 min at RT
Limitations	This CD79a antibody is available for research use only.



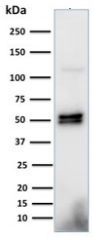
IHC testing of FFPE human tonsil tissue with CD79a antibody (clone HM57). Required HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min.



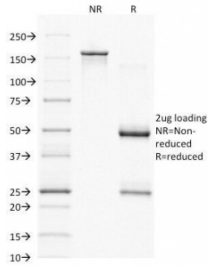
Immunofluorescent staining of PFA-fixed human Raji cells with CD79a antibody (green, clone HM57) and Reddot nuclear stain (red).



Flow cytometry testing of human Raji cells with CD79a antibody (clone HM57); Red=isotype control, Blue= CD79a antibody.



Western blot testing of human Raji cell lysate with CD79a antibody (clone HM57). Expected molecular weight: 25-47 kDa depending on glycosylation level.



SDS-PAGE analysis of purified, BSA-free CD79a antibody (clone HM57) as confirmation of integrity and purity.

Description

CD79a, also known as B-cell antigen receptor complex-associated protein alpha chain and MB-1 membrane glycoprotein, is a protein that in humans is encoded by the CD79A gene. The CD79a protein together with the related CD79b protein, forms a dimer associated with membrane-bound immunoglobulin in B-cells, thus forming the B-cell antigen receptor (BCR). This occurs in a similar manner to the association of CD3 with the T-cell receptor, and enables the cell to respond to the presence of antigens on its surface.

CD79a plays multiple and diverse roles in B cell development and function. The CD79a/b heterodimer associates non-covalently with the immunoglobulin heavy chain through its transmembrane region, thus forming the BCR along with the immunoglobulin light chain and the pre-BCR when associated with the surrogate light chain in developing B cells. Association of the CD79a/b heterodimer with the immunoglobulin heavy chain is required for surface expression of the BCR and BCR induced calcium flux and protein tyrosine phosphorylation. Genetic deletion of the transmembrane exon of CD79A results in loss of CD79a protein and a complete block of B cell development at the pro to pre B cell transition. Similarly, humans with homozygous splice variants in CD79A predicted to result in loss of the transmembrane region and a truncated or absent protein display agammaglobulinemia and no peripheral B cells. [Wiki]

Application Notes

Optimal dilution of the CD79a antibody should be determined by the researcher.

Immunogen

Amino acids 202-216 (GTYQDVGSLNIADVQ) were used as the immunogen for the CD79a antibody.

Storage

Store the CD79a antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).