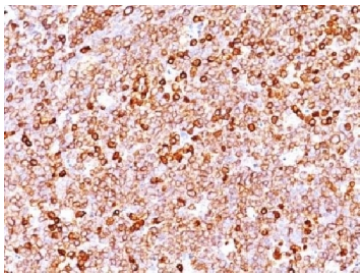
CD79a Antibody Rabbit Monoclonal [clone IGA/1688R] (V3482)

Catalog No.	Formulation	Size
V3482-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3482-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3482SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V3482IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

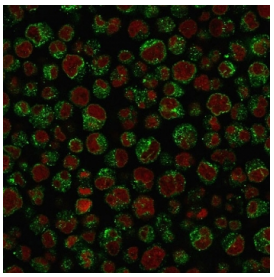
Recombinant RABBIT MONOCLONAL

Bulk quote request

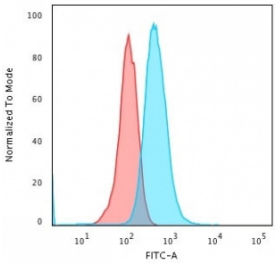
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	IGA/1688R
Purity	Protein A affinity chromatography
UniProt	P11912
Localization	Cell surface, cytoplasmic
Applications	Western Blot : 1-2ug/ml Immunofluorescence : 1-2ug/ml Flow Cytometry : 1-2ug/million cells Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT
Limitations	This CD79a antibody is available for research use only.



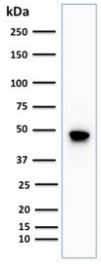
Immunohistochemistry analysis of CD79a / Ig-alpha antibody (clone IGA/1688R) in human tonsil tissue. Formalin-fixed, paraffin-embedded tonsil demonstrates strong membranous and cytoplasmic HRP-DAB brown staining in numerous lymphoid cells within follicular and interfollicular regions, consistent with B lymphocyte distribution. Background staining is minimal, and hematoxylin counterstain highlights overall lymphoid architecture. Heat-induced epitope retrieval was performed by boiling tissue sections in pH 9 10 mM Tris with 1 mM EDTA for 10-20 minutes followed by cooling at room temperature for 20 minutes prior to staining.



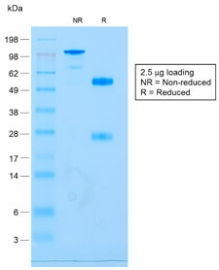
Immunofluorescence analysis of CD79a / Ig-alpha antibody (clone IGA/1688R) in PFA-fixed human Raji cells. CD79a antibody staining (green) demonstrates predominantly cytoplasmic and membranous fluorescence consistent with B cell receptor complex localization. Reddot nuclear stain (red) highlights cell nuclei. The staining pattern aligns with expected CD79a expression in B lymphocyte-derived Raji cells.



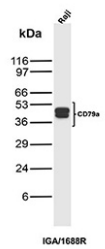
Flow cytometry testing of human Raji cells with CD79a antibody (clone IGA/1688R); Red=isotype control, Blue= CD79a antibody.



Western blot testing of human Raji cell lysate with CD79a antibody (clone IGA/1688R). Expected molecular weight: 25-47 kDa depending on glycosylation level.



SDS-PAGE analysis of purified, BSA-free recombinant CD79a antibody (clone IGA/1688R) as confirmation of integrity and purity.



Western blot analysis of CD79a / Ig-alpha antibody (clone IGA/1688R) in human Raji cell lysate. A clear doublet is detected at approximately 45-50 kDa, consistent with the predicted molecular weight range for CD79a and its commonly observed apparent migration on SDS-PAGE. The presence of two closely spaced bands is compatible with CD79a heterogeneity, such as differential N-linked glycosylation and or isoform processing, which can produce a doublet pattern in B cell lysates.

Description

CD79a antibody recognizes CD79a, a type I transmembrane protein encoded by the CD79A gene and also known as Ig-alpha and MB-1. CD79a is a critical component of the B cell receptor complex, forming a heterodimer with CD79b to associate with membrane-bound immunoglobulin. CD79a antibody is widely used in research focused on B lymphocyte development, differentiation, and B cell-derived malignancies. The protein is localized primarily to the cell membrane in mature B cells and can also be detected in the cytoplasm of precursor B cells during early stages of differentiation.

CD79a contains an extracellular immunoglobulin-like domain, a single transmembrane region, and a cytoplasmic tail that includes an immunoreceptor tyrosine-based activation motif. Upon antigen binding to surface immunoglobulin, the CD79a/CD79b complex transduces intracellular signaling through phosphorylation of this activation motif, leading to recruitment of downstream kinases and activation of pathways involved in B cell proliferation and survival. CD79a expression begins early in B cell ontogeny, preceding surface immunoglobulin expression, and is maintained throughout most stages of B cell maturation but is typically absent in plasma cells.

Because of its lineage-restricted expression, CD79a is an important marker in hematopathology research. It is commonly detected in normal B lymphocytes within lymphoid tissues and in B cell-derived lymphomas and leukemias. In tissue sections, immunostaining typically demonstrates membranous and cytoplasmic localization in B cells, while non-lymphoid tissues are negative. Clone IGA/1688R is a recombinant rabbit monoclonal antibody produced through defined sequence expression, supporting lot-to-lot consistency. This CD79a antibody enables investigation of B cell receptor biology, B cell lineage identification, and studies of lymphoid neoplasms in research applications.

Application Notes

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

1. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

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).