

CD79a (B-Cell Marker) Antibody - With BSA and Azide

Mouse Monoclonal Antibody [Clone IGA/515] Catalog # AH12823

Product Information

| Application | IHC, IF, FC |
|-------------------|---------------------|
| Primary Accession | <u>P11912</u> |
| Other Accession | <u>973, 631567</u> |
| Reactivity | Human |
| Host | Mouse |
| Clonality | Monoclonal |
| Isotype | Mouse / IgG1, kappa |
| Clone Names | IGA/515 |
| Calculated MW | 25038 |

Additional Information

| Gene ID | 973 |
|------------------|--|
| Other Names | B-cell antigen receptor complex-associated protein alpha chain, Ig-alpha, MB-1 membrane glycoprotein, Membrane-bound immunoglobulin-associated protein, Surface IgM-associated protein, CD79a, CD79A, IGA, MB1 |
| Application Note | IHC~~1:100~500 IF~~1:50~200 FC~~1:10~50 |
| Storage | Store at 2 to 8°C.Antibody is stable for 24 months. |
| Precautions | CD79a (B-Cell Marker) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures. |

Protein Information

| Name | CD79A |
|----------|--|
| Synonyms | IGA, MB1 |
| 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. |

| Cellular 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 Location | B-cells. |

Background

A disulphide-linked heterodimer, consisting of mb-1 (or CD79a) and B29 (or CD79b) polypeptides, is non-covalently associated with membrane-bound immunoglobulins on B cells. This complex of mb-1 and B29 polypeptides and immunoglobulin constitute the B cell Ag receptor. CD79a first appears at pre B cell stage, early in maturation, and persists until the plasma cell stage where it is found as an intracellular component. CD79a is found in the majority of acute leukemias of precursor B cell type, in B cell lines, B cell lymphomas, and in some myelomas. It is not present in myeloid or T cell lines. Anti-CD79a is generally used to complement anti-CD20 especially for mature B-cell lymphomas after treatment with Rituximab (anti-CD20). This antibody will stain many of the same lymphomas as anti-CD20, but also is more likely to stain B-lymphoblastic lymphoma/leukemia than is anti-CD20. Anti-CD79a also stains more cases of plasma cell myeloma and occasionally some types of endothelial cells as well.

References

van Noesel, C.J., et al. 1991. The membrane IgM-associated heterodimer on human B cells is a newly defined B cell antigen that contains the protein product of the mb-1 gene. J. Immunol. 146: 3881-3888. |

Images



Formalin-fixed, paraffin-embedded human Lymphoma stained with CD79a Monoclonal Antibody (IGA/515).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.