

# CD19 (B-Lymphocyte Marker) Antibody - With BSA and Azide

Mouse Monoclonal Antibody [Clone CVID3/429 ]

Catalog # AH12655

## Product Information

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<b>Application</b>	IF, FC
<b>Primary Accession</b>	<a href="#">P15391</a>
<b>Other Accession</b>	<a href="#">930</a> , <a href="#">652262</a>
<b>Reactivity</b>	Human, Monkey, Chimpanzee
<b>Host</b>	Mouse
<b>Clonality</b>	Monoclonal
<b>Isotype</b>	Mouse / IgG1, kappa
<b>Clone Names</b>	CVID3/429
<b>Calculated MW</b>	61128

## Additional Information

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<b>Gene ID</b>	930
<b>Other Names</b>	B-lymphocyte antigen CD19, B-lymphocyte surface antigen B4, Differentiation antigen CD19, T-cell surface antigen Leu-12, CD19, CD19
<b>Application Note</b>	IF~~1:50~200 FC~~1:10~50
<b>Storage</b>	Store at 2 to 8°C.Antibody is stable for 24 months.
<b>Precautions</b>	CD19 (B-Lymphocyte Marker) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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<b>Name</b>	CD19
<b>Function</b>	Functions as a coreceptor for the B-cell antigen receptor complex (BCR) on B-lymphocytes (PubMed: <a href="#">29523808</a> ). Decreases the threshold for activation of downstream signaling pathways and for triggering B-cell responses to antigens (PubMed: <a href="#">1373518</a> , PubMed: <a href="#">16672701</a> , PubMed: <a href="#">2463100</a> ). Activates signaling pathways that lead to the activation of phosphatidylinositol 3-kinase and the mobilization of intracellular Ca(2+) stores (PubMed: <a href="#">12387743</a> , PubMed: <a href="#">16672701</a> , PubMed: <a href="#">9317126</a> , PubMed: <a href="#">9382888</a> ). Is not required for early steps during B cell differentiation in the blood marrow (PubMed: <a href="#">9317126</a> ). Required for normal differentiation of B-1 cells (By similarity). Required for normal B cell differentiation and proliferation in response to antigen challenges (PubMed: <a href="#">1373518</a> , PubMed: <a href="#">2463100</a> ). Required for normal levels of serum immunoglobulins, and for production of

high-affinity antibodies in response to antigen challenge (PubMed:[12387743](#), PubMed:[16672701](#), PubMed:[9317126](#)).

**Cellular Location**

Cell membrane; Single-pass type I membrane protein. Membrane raft {ECO:0000250|UniProtKB:P25918}; Single-pass type I membrane protein {ECO:0000250|UniProtKB:P25918}

**Tissue Location**

Detected on marginal zone and germinal center B cells in lymph nodes (PubMed:2463100). Detected on blood B cells (at protein level) (PubMed:16672701, PubMed:2463100)

## Background

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CD19 is a transmembrane glycoprotein that contains two extracellular immunoglobulin-like domains. CD19 is present in both benign and malignant B-cells and is considered to be the most reliable surface marker of this lineage over a wide range of maturational stages. In normal lymphoid tissue, CD19 is observed in germinal centers, in mantle zone cells, and in scattered cells of the inter-follicular areas. Anti-CD19 exhibits an overall immunoreactivity pattern similar to those of the antibodies against CD20 and CD22. However, in contrast to CD20, expression of CD19 is continuous throughout B-cell development and through terminal differentiation of B-cells into plasma cells. Anti-CD19 positivity is seen in the vast majority of B-cell neoplasms commonly at a lower intensity than normal B-cell counterparts. Plasma cell neoplasms are nearly always negative, as are T-cell neoplasms.

## References

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Bregni, M. Siena, S., Formosa, A., Lippi, D.A., Martineau, D., Malavasi, F., Dorken, B., Bonadonna, G. and Gianni, A.M. 1989. B cell restricted saporin immunotoxins: activity against B cell lines and chronic lymphocytic leukemia cells. Blood 73: 753-76

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