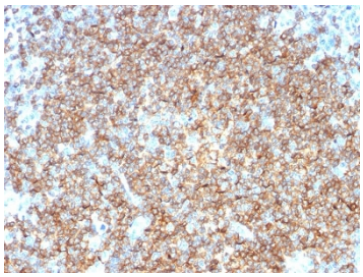
CD22 Antibody / CD22 Microarray Specificity Validated Antibody [clone BLCAM/1795] (V3693)

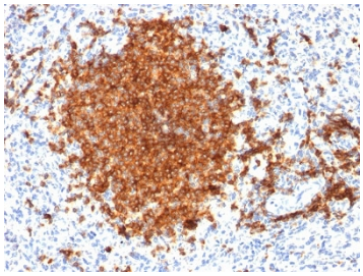
Catalog No.	Formulation	Size
V3693-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3693-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3693SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

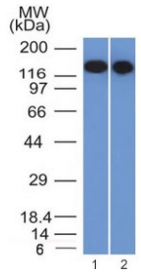
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	BLCAM/1795
Purity	Protein G affinity chromatography
UniProt	P20273
Localization	Cell surface, cytoplasmic
Applications	ELISA : 2-4ug/ml (order BSA/azide-free format) Flow Cytometry : 1-2ug/10^6 cells Western Blot : 1-2ug/ml Immunofluorescence : 1-2ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT
Limitations	This CD22 Antibody / CD22 Microarray Specificity Validated Antibody is available for research use only.



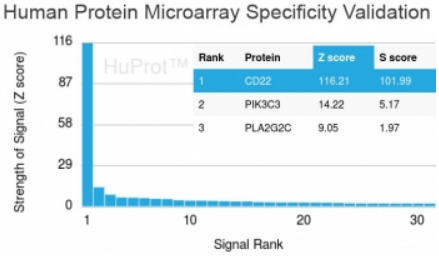
CD22 Antibody Tonsil IHC. Immunohistochemistry analysis of CD22/Siglec-2 expression in FFPE human tonsil tissue using CD22 Microarray Specificity Validated Antibody clone BLCAM/1795. Strong HRP-DAB brown membranous and cytoplasmic staining is observed in B cell-rich regions, highlighting dense populations of lymphocytes consistent with CD22 expression in mature B cells, while surrounding non-lymphoid tissue remains largely negative. The staining pattern supports use of this CD22 antibody for immunohistochemistry-based identification of B cell populations with high specificity. Heat-induced epitope retrieval was performed using citrate buffer (pH 6) for 10-20 minutes followed by cooling at room temperature prior to antibody incubation.



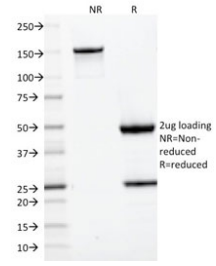
CD22 Antibody Spleen IHC. Immunohistochemistry analysis of CD22/Siglec-2 expression in FFPE human spleen tissue using CD22 Microarray Specificity Validated Antibody clone BLCAM/1795. Strong HRP-DAB brown staining is observed in lymphoid follicles within the white pulp, highlighting dense aggregates of B lymphocytes with predominant membranous and cytoplasmic localization, while surrounding red pulp regions and non-lymphoid cells show minimal staining. The distribution pattern is consistent with CD22 expression in mature B cell compartments and supports use of this CD22 antibody for immunohistochemistry-based evaluation of lymphoid tissue architecture with high specificity. Heat-induced epitope retrieval was performed using citrate buffer (pH 6) for 10-20 minutes followed by cooling at room temperature prior to antibody incubation.



Western blot testing of FFPE human 1) Raji and 2) Ramos cell lysate with CD22 antibody (clone BLCAM/1795). Expected molecular weight: 76/95 kDa (alpha/beta, unmodified), 130-150 kDa (glycosylated).



CD22 Antibody Specificity Validation. Protein microarray specificity analysis of CD22/Siglec-2 using CD22 Microarray Specificity Validated Antibody clone BLCAM/1795 on a HuProt array containing over 19,000 full-length human proteins. The antibody demonstrates highly selective binding to CD22 with minimal off-target interaction, supporting its specificity for accurate target detection. Z-score represents the signal intensity generated by antibody binding relative to the mean signal across the array, expressed as standard deviations above background. S-score reflects the difference between consecutive ranked Z-scores and indicates the relative specificity of the antibody for its intended target compared to other proteins on the array. These results support the use of this CD22 antibody for applications requiring high specificity and confident target identification.



SDS-PAGE analysis of purified, BSA-free CD22 antibody (clone BLCAM/1795) as confirmation of integrity and purity.

Description

CD22, also known as Siglec-2 and B-cell receptor CD22, is a B cell-restricted transmembrane glycoprotein encoded by

the CD22 gene that functions as a key regulator of B cell receptor signaling and immune homeostasis. CD22 Antibody / CD22 Microarray Specificity Validated Antibody (clone BLCAM/1795) is developed for high-confidence detection of CD22, with an emphasis on validated specificity to support accurate interpretation of experimental results. CD22 is predominantly expressed on mature B lymphocytes, where it modulates signaling thresholds and contributes to immune regulation, making it an important marker for studies of B cell biology and hematologic disease.

CD22 antibody, also referred to as Siglec-2 antibody or B-cell receptor CD22 antibody in the literature, is widely used for detection of CD22 expression in both cellular and lysate-based systems. Its cell surface localization and restricted expression profile enable clear identification of B cell populations and support analysis of immune cell composition across a variety of experimental platforms. Reliable detection of CD22 is particularly important in complex biological samples, where accurate distinction between cell types is required.

A defining feature of clone BLCAM/1795 is its validation by protein microarray specificity testing, in which binding is evaluated against a large panel of proteins to confirm selective recognition of CD22 with minimal off-target interaction. This approach provides a high level of confidence in antibody specificity, which is critical for experiments where non-specific binding could lead to misleading results. Microarray-based validation is especially valuable in multi-parameter and high-content assays, where signal clarity and specificity directly impact data quality.

The microarray-confirmed specificity of this CD22 antibody supports its use in applications requiring precise target recognition, including flow cytometry, immunofluorescence, and western blot analysis. In cell-based assays, CD22 is typically detected at the plasma membrane, while in lysate-based systems it may appear as a glycosylated protein with characteristic migration behavior. The ability to reliably detect CD22 across these contexts enhances its utility in studies of receptor expression, signaling regulation, and immune cell characterization.

Clone BLCAM/1795 is a mouse monoclonal CD22 antibody that provides consistent and reproducible target detection through defined epitope recognition. The monoclonal format contributes to reduced background staining and improved signal clarity, which is essential for accurate data interpretation across different experimental conditions. This level of consistency is particularly important in comparative studies and workflows requiring reproducible results.

Due to its combination of restricted expression, defined biological function, and microarray-validated specificity, CD22 remains an important target for high-confidence analysis of B cell populations. This CD22 antibody supports precise detection of CD22 in a wide range of research applications, enabling detailed investigation of immune regulation, cellular signaling, and disease-associated changes in B cell biology.

This antibody is part of the broader CD22 antibody collection for studying B cell markers, immune regulation, and hematologic malignancies.

Application Notes

Optimal dilution of the CD22 Antibody / CD22 Microarray Specificity Validated Antibody should be determined by the researcher.

Immunogen

Amino acids 52-178 from the human protein were used as the immunogen for the CD22 antibody.

Storage

Store the CD22 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

Siglec-2 antibody, B-cell receptor CD22 antibody, B lymphocyte antigen CD22 antibody, CD22 validated antibody, CD22 specificity antibody