CD22 Antibody for IHC / CD22 Immunohistochemistry Antibody [clone MSVA-022R] (V6145)

Catalog No.	Formulation	Size
V6145-100UG	Antibody in 1X PBS with 0.05% BSA, 0.05% sodium azide	100 ug
V6145-20UG	Antibody in 1X PBS with 0.05% BSA, 0.05% sodium azide	20 ug

Recombinant RABBIT MONOCLONAL

Bulk quote request

Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	MSVA-022R
UniProt	P20273
Localization	Cell membrane
Applications	Immunohistochemistry (FFPE) : 1:100-1:200
Limitations	This CD22 Antibody for IHC / CD22 Immunohistochemistry Antibody is available for research use only.

CD22 Antibody for IHC Tissue Microarray (TMA). Immunohistochemistry analysis of CD22 molecule / CD22, also known as Siglec-2, in formalin-fixed paraffin-embedded human normal and cancer tissue microarrays using recombinant rabbit monoclonal CD22 antibody clone MSVA-022R. Tissue microarray (TMA) staining with HRP-DAB brown chromogen demonstrates membranous and cytoplasmic localization in B lymphocyte populations, with strong signal observed in lymph node germinal centers, tonsil, and splenic white pulp, while most non-lymphoid tissues remain largely negative. Within tumor tissue microarrays, robust staining is observed in B cell lymphomas, including diffuse large B-cell lymphoma and follicular lymphoma, with clear distinction from surrounding stromal and epithelial compartments. Evaluation across large TMA panels enables direct comparison of CD22 expression across diverse tissue types under standardized conditions. The observed staining patterns align with reported CD22 expression profiles in publicly available datasets including the Human Protein Atlas.

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 critical regulator of B cell receptor signaling and immune tolerance. CD22 Antibody for IHC / CD22 Immunohistochemistry Antibody (clone MSVA-022R) is optimized for high-resolution detection of CD22 in formalin-fixed, paraffin-embedded tissues, enabling precise visualization of B cell populations within intact tissue architecture. CD22 expression is tightly restricted to mature B lymphocytes, including follicular and mantle zone B cells, making it a highly specific marker for identifying B cell lineage in immunohistochemistry studies.

CD22 antibody, also referred to as Siglec-2 antibody or B-cell receptor CD22 antibody in the literature, is uniquely suited for tissue-based analysis where spatial context is essential. In immunohistochemistry, CD22 demonstrates a consistent membranous and cytoplasmic staining pattern that highlights B cell distribution within lymphoid organs such as lymph node, tonsil, and spleen. This staining pattern allows clear delineation of germinal centers and surrounding B cell zones, supporting detailed evaluation of lymphoid architecture in both normal and reactive tissues.

The strength of CD22 Antibody for IHC is particularly evident in tissue microarray analysis, where parallel staining across a wide range of normal tissues reinforces its lineage specificity. In tissue microarray panels, CD22 staining is consistently confined to lymphoid compartments, with strong signal observed in B cell-rich regions and minimal to absent staining in epithelial, stromal, and parenchymal tissues. This high contrast between positive and negative compartments enhances interpretability and makes CD22 a reliable marker for identifying lymphoid infiltrates within complex tissue environments.

In cancer tissue microarray studies, CD22 expression remains robust in B cell-derived malignancies, including diffuse large B-cell lymphoma, follicular lymphoma, and other non-Hodgkin lymphomas. Immunohistochemistry staining highlights neoplastic B cells with clear membranous and cytoplasmic localization, allowing distinction from surrounding non-neoplastic cells. Importantly, most non-B cell tumors lack CD22 expression, further supporting its use as a lineage-specific marker in diagnostic and research immunohistochemistry applications.

The recombinant rabbit monoclonal format of this CD22 antibody, clone MSVA-022R, supports consistent staining intensity and low background across tissue microarray platforms, where reproducibility is critical for comparative analysis. This consistency is particularly valuable in large-scale tissue microarray studies that require uniform performance across diverse tissue types and experimental conditions.

Due to its restricted expression profile, strong performance in FFPE tissues, and compatibility with tissue microarray workflows, CD22 remains an essential marker for immunohistochemistry-based investigation of B cell biology, tumor classification, and immune cell distribution. This CD22 antibody enables detailed tissue-level analysis, supporting studies of lymphoid organization, malignant B cell identification, and immune infiltration within normal and diseased tissues.

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

This antibody is also part of a broader collection of IHC antibodies validated by tissue microarray analysis, supporting consistent staining across normal and cancer tissues.

Application Notes

1. Optimal dilution of the CD22 Antibody for IHC / CD22 Immunohistochemistry Antibody should be determined by the researcher.

2. This CD22 / CD22 molecule antibody is recombinantly produced by expression in CHO cells.

3. Manual Protocol: Freshly cut sections should be used (less than 10 days between cutting and staining). Heat-induced antigen retrieval for 5 minutes in an autoclave at 121oC in pH 7.8 Target Retrieval Solution buffer. Apply the antibody at a dilution of 1:150 at 37oC for 60 minutes. Visualization of bound antibody by the EnVision Kit (Dako, Agilent) according to the manufacturer's directions.

Immunogen

A recombinant fragment (around amino acids 52-178) of human BL-CAM / CD22 protein (exact sequence is proprietary) was used as the immunogen for the CD22 Antibody for IHC / CD22 molecule antibody.

Storage

CD22 Antibody for IHC / CD22 molecule antibody with sodium azide - store at 2 to 8oC; antibody without sodium azide - store at -20 to -80oC.

Alternate Names

Siglec-2 antibody, B-cell receptor CD22 antibody, B lymphocyte antigen CD22 antibody, CD22 IHC antibody, CD22 TMA antibody