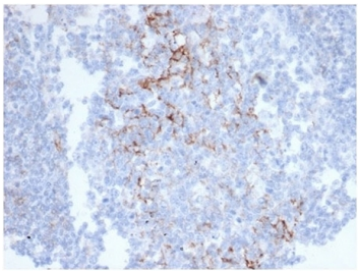
CD23 Antibody - Microarray Validation [clone FCER2/6890] (V8871)

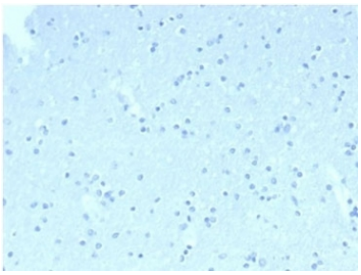
Catalog No.	Formulation	Size
V8871-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V8871-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V8871SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

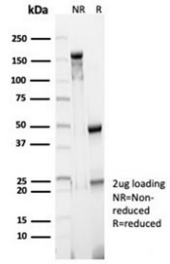
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	FCER2/6890
Purity	Protein A/G affinity
UniProt	P06734
Localization	Cell Surface
Applications	Immunohistochemistry (FFPE): 2-4ug/ml
Limitations	This CD23 antibody is available for research use only.



CD23 Antibody Colon Immunohistochemistry. IHC staining of FFPE human colon tissue with CD23 antibody (clone FCER2/6890) at 2ug/ml in PBS for 30min RT. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



Negative control: IHC staining of FFPE human brain tissue with CD23 antibody (clone FCER2/6890) at 2ug/ml in PBS for 30min RT. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



SDS-PAGE analysis of purified, BSA-free CD23 antibody (clone FCER2/6890) as confirmation of integrity and purity.



Protein microarray validation of CD23 Antibody - Microarray Validation (clone FCER2/6890). Analysis of a protein array containing more than 19,000 full-length human proteins was performed using CD23 antibody clone FCER2/6890. The antibody demonstrates highest reactivity with FCER2, confirming specific recognition of CD23, with substantially lower signal intensity observed for non-target proteins. These results support the target specificity of the FCER2/6890 monoclonal antibody.
Z- and S-score explanation: The Z-score represents the strength of the fluorescent signal generated when the monoclonal antibody binds to a specific protein on the HuProt array, expressed as standard deviations above the mean signal of all proteins on the array. When proteins are arranged in descending order according to Z-score, the S-score is calculated as the difference in Z-scores between adjacent ranked proteins. The S-score therefore reflects the relative specificity of the monoclonal antibody for its intended target compared to other proteins on the array. An antibody is generally considered specific for its intended target when the S-score is at least 2.5.

Description

CD23 Antibody Microarray Validation (clone FCER2/6890) recognizes CD23, a type II transmembrane glycoprotein encoded by the FCER2 gene on chromosome 19p13.3. CD23 is also known as Low affinity immunoglobulin epsilon Fc receptor or Fc epsilon receptor II and is a member of the C-type lectin family. It functions as the low affinity receptor for IgE and plays a key role in regulating IgE mediated immune responses, B cell activation, and humoral immunity. CD23 is predominantly expressed on mature B lymphocytes and certain activated immune cell subsets.

Structurally, CD23 consists of a short cytoplasmic N-terminal domain, a single transmembrane region, and a large extracellular C-type lectin-like domain responsible for binding IgE. In addition to its membrane bound form, CD23 can be cleaved to generate soluble fragments that retain biological activity and influence immune signaling. Through interactions with IgE and CD21, CD23 participates in antigen presentation, modulation of IgE synthesis, and regulation of B cell proliferation and differentiation. Subcellular localization is primarily membranous, often accompanied by variable cytoplasmic staining depending on activation state and cellular processing.

In normal tissues, CD23 expression is most prominent in secondary lymphoid organs such as tonsil, lymph node, and spleen. Within these tissues, CD23 is characteristically expressed by follicular B cells in germinal centers and mantle zones, where it contributes to regulation of antibody responses. The staining pattern typically highlights follicular architecture, with strong membranous labeling in B cell rich regions and limited staining in T cell predominant interfollicular areas. CD23 antibody is widely used in research settings focused on B cell biology and immune regulation.

Microarray validation of clone FCER2/6890 against a comprehensive panel of human proteins supports high specificity for CD23, demonstrating preferential binding to FCER2 relative to non-target proteins. CD23 Antibody microarray validation (clone FCER2/6890) is suitable for detecting CD23 expression in research applications involving immunology, allergy mechanisms, and lymphoid tissue studies.

Explore our central CD23 antibody resource page for additional western blot, immunohistochemistry, and microarray specificity validation data supporting studies of B-cell activation, germinal center biology, and IgE receptor signaling pathways.

Application Notes

Optimal dilution of the CD23 antibody should be determined by the researcher.

Immunogen

A portion of amino acids 48-321 was used as the immunogen for the CD23 antibody with microarray validation.

Storage

Aliquot the CD23 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

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