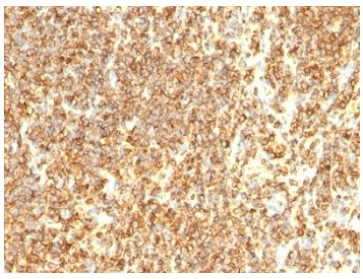
CD20 Antibody [clone SPM494] (V2397)

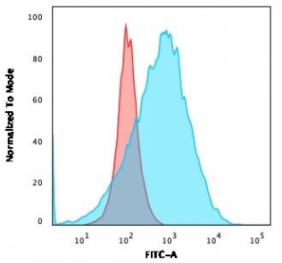
Catalog No.	Formulation	Size
V2397-0.5ML	Bioreactor concentrate with 0.05% sodium azide	0.5 ml
V2397-0.1ML	Bioreactor concentrate with 0.05% sodium azide	0.1 ml
V2397IHC-7ML	Prediluted in 1X PBS, 0.05% sodium azide; *For IHC use only*	7 ml

Bulk quote request

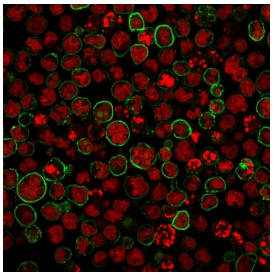
Species Reactivity	Human
Format	Bioreactor concentrate
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2a, kappa
Clone Name	SPM494
Buffer	1X PBS, pH 7.4
UniProt	P11836
Localization	Predominantly cell surface with some cytoplasmic
Applications	Flow Cytometry : 2-5ul/10^6 cells Immunofluorescence : 1:100-1:200 Immunohistochemistry (FFPE) : 1:100-1:200 for 30 min at RT
Limitations	This CD20 antibody is available for research use only.



IHC testing of CD20 antibody and FFPE human lymphoma tissue (clone SPM494).



Flow cytometry testing of human Raji cells with CD20 antibody (clone SPM494); Red=isotype control, Blue= CD20 antibody.



Immunofluorescent staining of human MOLT-4 cells with CD20 antibody (green, clone SPM494) and Reddot nuclear stain (red).

Description

This antibody recognizes a protein of 33-37kDa, identified as CD20. The epitope is similar to or identical to that recognized by other CD20 antibodies including Leu-16 and B1. This antibody can be used for immunophenotyping of leukemia and malignant cells, B lymphocyte detection in peripheral blood, Bcell localization in tissues and B lymphocyte purification by immunosorbent methods. CD20 is a non-Ig differentiation antigen of B-cells and its expression is restricted to normal and neoplastic B-cells, being absent from all other leukocytes and tissues. It is expressed by pre Bcells and persists during all stages of B-cell maturation but is lost upon terminal differentiation into plasma cells. Protein passes through the membrane 4 times with both ends in cytoplasm and exposes one short and one longer loop to the external environment. CD20 is not glycosylated in resting B-cells and its cytoplasmic domains are differentially phosphorylated upon activation. It acts as a calcium channel involved in B-cell activation and cell cycle progression.

Application Notes

The concentration stated for each application is a general starting point. Variations in protocols, secondaries and substrates may require the CD20 antibody to be titered up or down for optimal performance.

1. Staining of formalin-fixed tissues requires boiling tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min followed by cooling at RT for 20 minutes.
2. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

Human tonsil B cells were used as the immunogen for this CD20 antibody.

Storage

CD20 antibody with azide can be stored at 2-8oC. The azide-free format should be aliquoted and stored at -20oC or colder.

References (4)