

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human CD20. Stains human CD20 transfectants but not irrelevant transfectants.
Source	Monoclonal Mouse IgG ₁ Clone # 396444
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	NS0 mouse myeloma cell line transfected with human CD20 Met1-Pro297 Accession # P11836
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

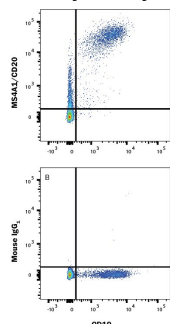
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Flow Cytometry	0.25 µg/10 ⁶ cells	See Below
Immunohistochemistry	5-25 µg/mL	See Below
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

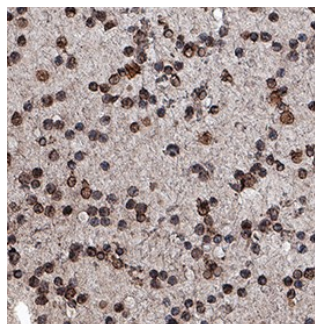
DATA

Flow Cytometry



Detection of MS4A1/CD20 in Human PBMCs by Flow Cytometry. Human peripheral blood mononuclear cells (PBMCs) were stained with either (A) Mouse Anti-Human MS4A1/CD20 Monoclonal Antibody (Catalog # MAB4225) or (B) Mouse IgG1 Isotype Control (Catalog # MAB002) followed by anti-Mouse IgG APC-conjugated Secondary Antibody (Catalog # F0101B) and Mouse Anti-Human CD19 PE-conjugated Monoclonal Antibody (Catalog # FAB4867P). Staining was performed using our Staining Membrane-associated Proteins protocol.

Immunohistochemistry



CD20 in Human Leukemia. CD20 was detected in immersion fixed paraffin-embedded sections of human leukemia using Mouse Anti-Human CD20 Monoclonal Antibody (Catalog # MAB4225) at 15 µg/mL for 1 hour at room temperature followed by incubation with the Anti-Mouse IgG VisUCyte™ HRP Polymer Antibody (Catalog # Catalog # VC001). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to lymphocytes. View our protocol for [IHC Staining with VisUCyte HRP Polymer Detection Reagents](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> 12 months from date of receipt, -20 to -70 °C as supplied. 1 month, 2 to 8 °C under sterile conditions after reconstitution. 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

CD20 is a 297 amino acid (aa) non-glycosylated type III membrane protein that is the founding member of the MS4A tetraspanin protein family. It is expressed on pre-B, naïve and mature B lymphocytes and B-cell lymphomas. CD20 is associated with lipid rafts upon crosslinking, and appears to play a role in regulation of ion influx. The one extracellular segment of 48 aa shows 65% aa sequence identity between human and mouse CD20.