

Datasheet for ABIN94025

anti-CD20 antibody

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Overview

Quantity:	0.1 mg
Target:	CD20 (MS4A1)
Reactivity:	Human, Cow
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This CD20 antibody is un-conjugated
Application:	Flow Cytometry (FACS), Immunoprecipitation (IP)

Product Details

Immunogen:	Raji human Burkitt's lymphoma cell line
Clone:	MEM-97
Isotype:	IgG1
Specificity:	The antibody MEM-97 reacts with an extracellular epitope on CD20 (Bp35), a 33-37 kDa non-glycosylated membrane receptor with four transmembrane domains, expressed on B lymphocytes (it is lost on plasma cells), follicular dendritic cells, and at low levels on peripheral blood T lymphocytes.
Cross-Reactivity (Details):	Human, Porcine, Bovine
Purification:	Purified by protein-A affinity chromatography.
Purity:	> 95 % (by SDS-PAGE)

Target Details

Target:	CD20 (MS4A1)
Alternative Name:	CD20 (MS4A1 Products)
Background:	<p>MS4A1,CD20 is a cell surface 33-37 (depending on the degree of phosphorylation) kDa non-glycosylated surface phosphoprotein expressed on mature and most malignant B cells, but not stem cells or plasma cells (low number of the CD20 has been also detected on a subpopulation of T lymphocytes and it can be expressed on follicular dendritic cells). Its expression on B cells is synchronous with the expression of surface IgM. CD20 regulates transmembrane calcium conductance (probably functioning as a component of store-operated calcium channel), cell cycle progression and B-cell proliferation. It is associated with lipid rafts, but the intensity of this association depends on extracellular triggering, employing CD20 conformational change and/or BCR (B cell antigen receptor) aggregation. After the receptor ligation, BCR and CD20 colocalize and then rapidly dissociate before BCR endocytosis, whereas CD20 remains at the cell surface. CD20 serves as a useful target for antibody-mediated therapeutic depletion of B cells, as it is expressed at high levels on most B-cell malignancies, but does not become internalized or shed from the plasma membrane following mAb treatment.,B1, S7, MS4A, Bp35, CVID5, LEU-16</p>
Gene ID:	931
UniProt:	P11836

Application Details

Application Notes:	Flow cytometry: Recommended dilution: 1-5 µg/mL.
Restrictions:	For Research Use only

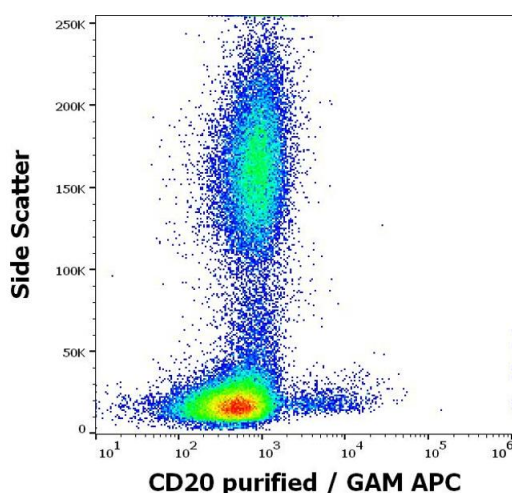
Handling

Concentration:	1 mg/mL
Buffer:	Phosphate buffered saline (PBS), pH 7.4, 15 mM sodium azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Handling Advice:	Do not freeze.
Storage:	4 °C
Storage Comment:	Store at 2-8°C. Do not freeze.

Publications

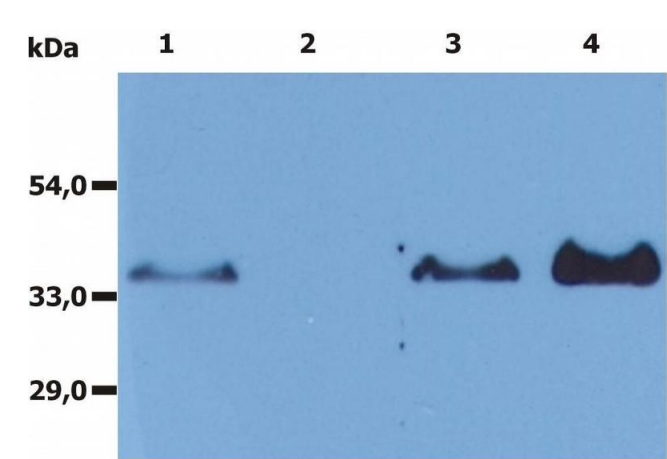
- Product cited in: Faldyna, Samankova, Leva, Cerny, Oujezdská, Rehakova, Sinkora: "Cross-reactive anti-human monoclonal antibodies as a tool for B-cell identification in dogs and pigs." in: **Veterinary immunology and immunopathology**, Vol. 119, Issue 1-2, pp. 56-62, (2007) ([PubMed](#)).
- Brdicková, Brdicka, Angelisová, Horváth, Spicka, Hilgert, Paces, Simeoni, Kliche, Merten, Schraven, Horejsí: "LIME: a new membrane Raft-associated adaptor protein involved in CD4 and CD8 coreceptor signaling." in: **The Journal of experimental medicine**, Vol. 198, Issue 10, pp. 1453-62, (2003) ([PubMed](#)).
- Szöllősi, Horejsí, Bene, Angelisová, Damjanovich: "Supramolecular complexes of MHC class I, MHC class II, CD20, and tetraspan molecules (CD53, CD81, and CD82) at the surface of a B cell line JY." in: **Journal of immunology (Baltimore, Md. : 1950)**, Vol. 157, Issue 7, pp. 2939-46, (1996) ([PubMed](#)).
- Strobl, Takimoto, Majdic, Fritsch, Scheinecker, Höcker, Knapp: "Myeloperoxidase expression in CD34+ normal human hematopoietic cells." in: **Blood**, Vol. 82, Issue 7, pp. 2069-78, (1993) ([PubMed](#)).

Images



Flow Cytometry

Image 1. Flow cytometry surface staining pattern of human peripheral whole blood stained using anti-human CD20 (MEM-97) purified antibody (concentration in sample 1.6 µg/mL) GAM APC.

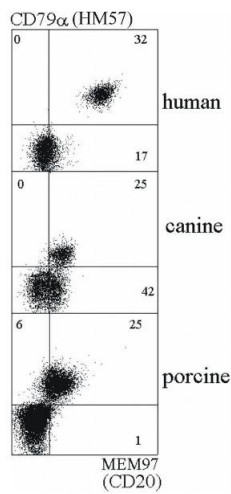


Immunoprecipitation

Image 2. Immunoprecipitation of human CD20 from the whole cell lysate of RAJI human Burkitt lymphoma cell line. Western blot was immunostained with anti-CD20 rabbit polyclonal antibody. Lane 1: original lysate of RAJI cells Lane 2: immunoprecipitate by Isotypic mouse IgG1 control (PPV-06) Lane 3: Lane 4: immunoprecipitate by anti-CD20 (MEM-97)

Flow Cytometry

Image 3. Double staining of human, canine and porcine B lymphocytes with anti-CD79a (HM57) and anti-CD20 antibody.



Please check the [product details page](#) for more images. Overall 4 images are available for ABIN94025.