

Rabbit Anti-CD20 antibody

SL0080R

Product Name	CD20
Chinese Name	CD20 抗体
Alias	CD20_HUMAN; B-lymphocyte antigen CD20; B-lymphocyte surface antigen B1; Bp35; Leukocyte surface antigen Leu-16; Membrane-spanning 4-domains subfamily A member 1; MS4A1; MS4A2; B1; CVID5; LEU-16; S7.
Research Area	Tumour immunology Stem cells Cell Surface Molecule Cell type markers lymphocyte b-lymphocyte
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	Human, Mouse, Rat, (predicted: Dog, Cow, Rabbit,) WB=1:500-2000,Flow-Cyt=1µg /Test,ELISA=1:5000-10000
Applications	not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Theoretical molecular weight	33kDa
Cellular localization	The cell membrane
Form	Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthetic peptide derived from human CD20: 133-182/297 <Cytoplasmic>
Lsotype	IgG
Purification	affinity purified by Protein A
Buffer Solution	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.
Storage	Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Attention	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
PubMed	PubMed
Product Detail	CD20 is a non glycosylated protein with a molecular weight of 35 or 37 kDa

depending on the degree of phosphorylation. Although not a member of the tetraspanin superfamily of cell surface receptors, it crosses the cell membrane four times. The CD20 antigen is present on human pre B lymphocytes and on B lymphocytes at all stages of maturation, except on plasma cells. Low level expression of the CD20 antigen has been detected on normal T lymphocytes. The CD20 molecule is involved in regulation of B cell differentiation, presumably via its reported function as a Ca⁺⁺ channel subunit.

Function:

This protein may be involved in the regulation of B-cell activation and proliferation

Subcellular Location:

Membrane; Multi-pass membrane protein.

Tissue Specificity:

Expressed on B-cells.

Post-translational modifications:

Phosphorylated. Might be functionally regulated by protein kinase(s).

DISEASE:

Defects in MS4A1 are the cause of immunodeficiency common variable type 5 (CVID5) [MIM:613495]; also called antibody deficiency due to CD20 defect. CVID5 is a primary immunodeficiency characterized by antibody deficiency, hypogammaglobulinemia, recurrent bacterial infections and an inability to mount an antibody response to antigen. The defect results from a failure of B-cell differentiation and impaired secretion of immunoglobulins; the numbers of circulating B-cells is usually in the normal range, but can be low.

Similarity:

Belongs to the MS4A family.

SWISS:

P11836

Gene ID:

931

Database links:

[Entrez Gene: 931](#) Human

[Omim: 112210](#) Human

[SwissProt: P11836](#) Human

[Unigene: 712553](#) Human

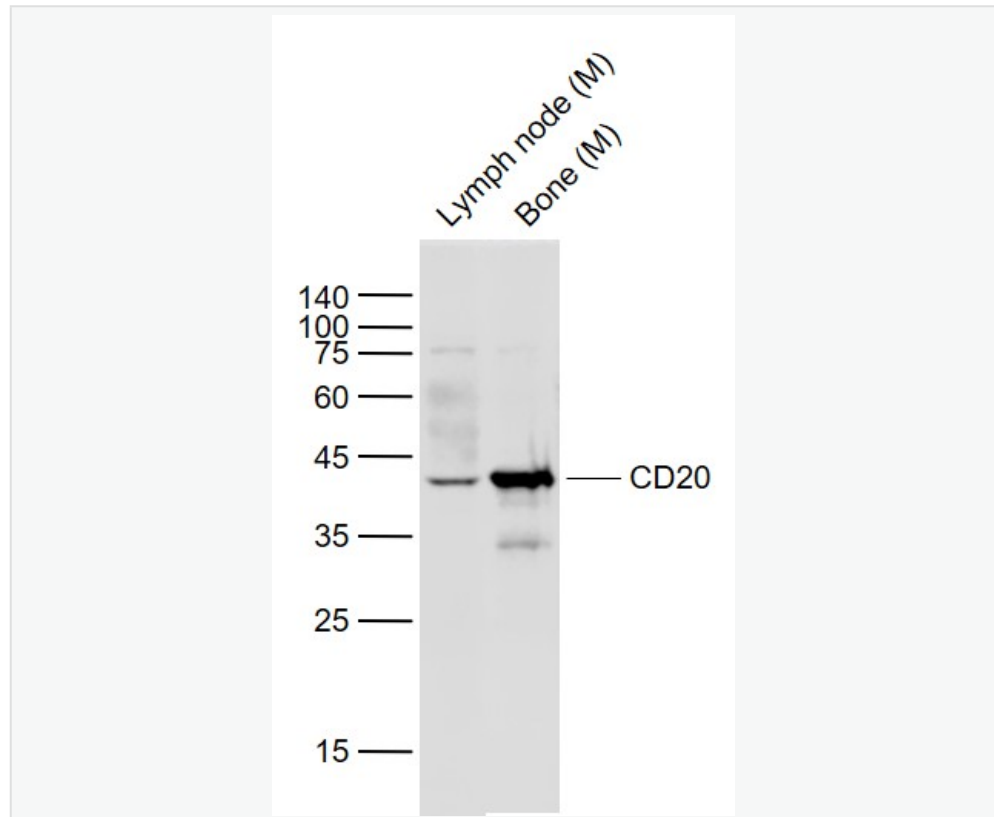
[PHARMACEUTICAL] Monoclonal antibodies (mAb) against CD20 are used to treat B-cell non-Hodgkin lymphoma (NHL). These antibodies include Rituximab (Mabthera), Britumomab (Zevalin) and Tositumomab (Bexxar). CD20 engaged by mAb can generate transmembrane signals capable of directly controlling cell growth and triggering cell death in certain tumors. Alternatively, mAb can mediate complement-dependent cytotoxicity.

BlymphocyteMaker

CD20 是 B 细胞特异性抗原，其表达呈细胞类型一种质膜蛋白质，参与信号传导作用，此抗体识别大多数 B 细胞上的一种抗原。多用于标记 Blymphocyte 及 B 细胞淋巴瘤。

CD20 一般不与 T 细胞 React Species，对 B 细胞淋巴瘤和急慢性 lymphocyte 白血病等有良好的细胞特异性，因此在恶性淋巴瘤，尤其是 T 或 B 细胞淋巴瘤的分类上，CD20 是最常用的 B 细胞标志。

Product Picture



Sample:

Lane 1: Lymph node (Mouse) Lysate at 40 ug

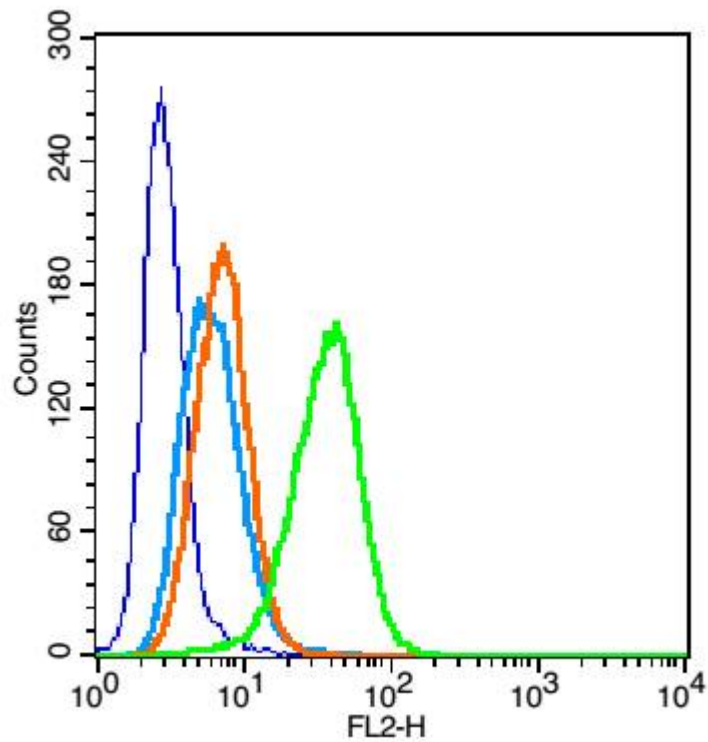
Lane 2: Bone (Mouse) Lysate at 40 ug

Primary: Anti-CD20 (SL0080R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 43 kD

Observed band size: 43 kD



Blank control: U937 (blue).

Primary Antibody: Rabbit Anti- CD20 antibody(SL0080R), Dilution: 1 μ g in 100 μ L 1X PBS containing 0.5% BSA;

Isotype Control Antibody: Rabbit IgG(orange) ,used under the same conditions);

Secondary Antibody: Goat anti-rabbit IgG-PE(white blue), Dilution: 1:200 in 1 X PBS containing 0.5% BSA.

Protocol

The cells were fixed with 2% paraformaldehyde (10 min) . Primary antibody (SL0080R, 1 μ g /1x10⁶ cells) were incubated for 30 min on the



ice, followed by 1 X PBS containing 0.5% BSA + 1 0% goat serum (15 min) to block non-specific protein-protein interactions. Then the Goat Anti-rabbit IgG/PE antibody was added into the blocking buffer mentioned above to react with the primary antibody at 1/200 dilution for 30 min on ice. Acquisition of 20,000 events was performed.