

YR0009

Leader in Biomolecular Solutions for Life Science



# Human CD20 Monoclonal Antibody

Catalog No.: YR0009

## Basic Information

### Molecular Weight

150 kDa

### Endotoxin

<1EU/mg (<0.001EU/μg) Determined by LAL gel clotting assay

### Sterility

0.2 μm filtration

### Aggregation

<5% Determined by SECP

### Purity

>95% Determined by SEC-HPLC

## Background

B-lymphocyte antigen CD20 encoded by the MS4A1 gene is an activated-glycosylated phosphoprotein on the surface of all B-cells. The function of the membrane protein is to stimulate B-cell immune response, specifically against T-independent antigens though its natural ligand remains unknown. CD20 is important for the development and differentiation of B-cells into plasma cells. CD20 belongs to the membrane-spanning 4A family with common structural features, similar intron/exon splice boundaries, and unique expression patterns among hematopoietic cells and nonlymphoid tissues. Rituximab, a chimeric anti-CD20 monoclonal antibody, destroys B cells and is used to treat diseases with excessive numbers of B cells, overactive B cells, or dysfunctional B cells, such as many lymphomas, leukemias, transplant rejection, and autoimmune disorders.

## Reported Applications

ELISA, neutralization, functional assays such as bioanalytical PK and ADA assays, and those assays for studying biological pathways

## Immunogen Information

### Clone

Rituximab Biosimilar

### Isotype

Human IgG1 kappa

### Immunogen

Human CD20

### Recommended Isotype Control(s)

In Vivo Grade Recombinant Human IgG1 Kappa Isotype Control Antibody

### Recommended Dilution Buffer

1×PBS pH 7.3

## Contact



[www.abclonal.com](http://www.abclonal.com)

## Product Information

### Production

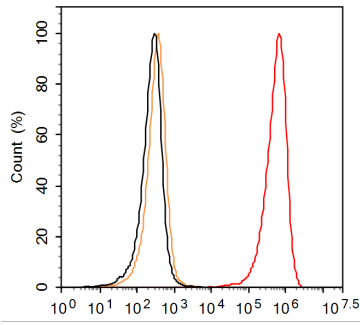
Purified from cell culture supernatant in an animal-free facility

### Purification

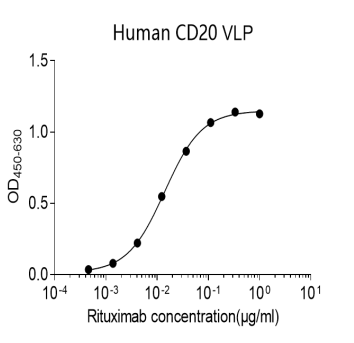
Protein A or G purification

### Storage

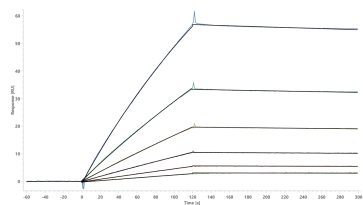
Store at 2 - 8°C. 2 - 8°C for up to 4 weeks and -80°C for long term storage (Avoid repeated freezing and thawing)



Detection of CD20 in Daudi cell line by Flow Cytometry. Daudi cell line was stained with Biotinylated Human Anti-Human CD20 (Rituximab Biosimilar) Monoclonal Antibody followed by APC conjugated NeutrAvidin Secondary Antibody, or unstained cells (open yellow histogram).



Direct ELISA binding curve demonstrating the recognition of Human Anti-Human CD20 (Research Grade Rituximab Biosimilar) Monoclonal Antibody to CD20. The target protein was coated onto the microplate well surface, followed by binding of the antibody. A donkey anti-human IgG HRP conjugate was used for detection.



Determined through SPR assay, the Human Anti-Human CD20 (Research Grade Rituximab Biosimilar) Monoclonal Antibody is capable of binding to Human CD20 with an affinity constant of 2.22 nM.