

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

Product Information

Production

Purified from cell culture supernatant in an animal-free facility

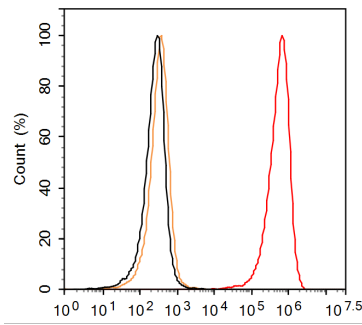
Purification

Protein A or G purification

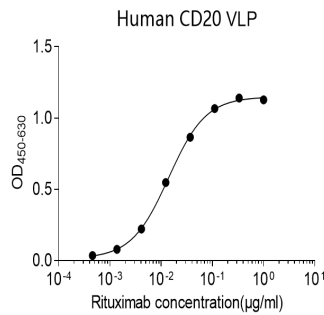
Storage

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)

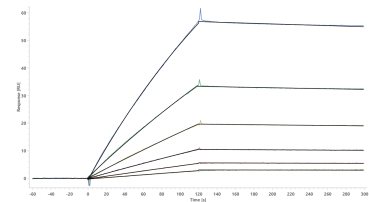
Validation Data



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.