

Product Information

Description:	Biotinylated anti-CD20 IgG antibody is a purified recombinant antibody which recognizes human CD20 antigen. This antibody has been tested for specific binding to purified human CD20 protein.
Background:	CD20 (also known as membrane spanning 4-domains A1 or MS4A1) is a glycosylated phosphoprotein expressed on the cell surface of B cells. Although the functional significance of CD20 is not clear, it has been shown to regulate intracellular calcium levels. CD20 is a highly attractive target antigen for immunotherapy because it is expressed in more than 90% of patients with B-cell lymphoma. First approved in 1997, Rituximab (Rituxan) is a chimeric monoclonal antibody targeting CD20 and has been classified by the World Health Organization as an “Essential Medicine”. Since then, additional monoclonal antibodies against CD20 have been approved or are being tested in clinical trials for the treatment of multiple sclerosis (MS), chronic lymphocytic leukemia (CLL), follicular lymphoma, diffuse large B cell lymphoma (DLBCL), rheumatoid arthritis, non-Hodgkin’s lymphoma, systemic lupus erythematosus, and myalgic encephalomyelitis (chronic fatigue syndrome). More recently, anti-CD20-CD19 bispecific CAR-T cells have been developed.
Species:	Human
Isotype:	IgG1
Concentration:	1.24 mg/ml
Expression System:	Heavy chain (HC) and Light chain (LC) co-expressed in HEK293
Purification:	Protein A affinity
Purity:	≥90%
Format:	Aqueous buffer solution
Formulated In:	8 mM phosphate, pH 7.4, 110 mM NaCl, 2.2 mM KCl, and 20% glycerol
Label:	his protein is enzymatically biotinylated using Avi-Tag™ technology. Biotinylation was confirmed to be ≥90%.
Stability:	At least 12 months at -80°C. Avoid freeze/thaw cycles.
Storage:	-80°C
MW:	Heavy Chain: 53 kDa; Light Chain: 23 kDa
Assay Conditions:	Functional validation: The antibody was validated by ELISA using a purified CD20 antigen. The CD20 protein was coated onto a 96-well plate overnight at 4°C (50 µl/well at a concentration of 4 µg/ml in PBS). The plate was washed 3 times with Immuno Buffer 1 (BPS Bioscience #79311) and blocked using 100 µl of Blocking Buffer 2 (BPS Bioscience #79728) for 1 hour at room temperature. After removing the blocking buffer, 50 µl/well of purified biotinylated anti-CD20 antibody (BPS Bioscience #101207), serially diluted in Blocking Buffer 2, was added for 30 minutes at room temperature. After 3 more washes, the plate was incubated with Streptavidin-HRP, washed, and incubated with the Colorimetric HRP substrate. The reaction was stopped, and absorbance was read at 450 nm. The Blank value was subtracted from all values.
Applications:	This product is for research use only. It is not suitable for human diagnostic or therapeutic use.

Quality Control Data

4-20% SDS-PAGE Coomassie Staining

CD20:anti CD20-Biotin Binding Assay

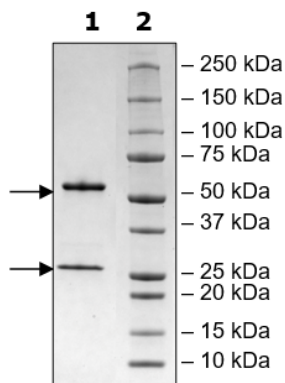
Protein Lot# 211021

4-20% SDS-PAGE Coomassie staining

Lane 1:
5 µg Anti-CD20

Lane 2:
Protein Marker

MW:
LC: 23kDa
HC: 53kDa
Purity: ≥90%



CD20:anti CD20-Biotin Binding Assay

