

Datasheet for ABIN7013536
CD20 Protein (AA 1-297) (His tag)

3 Images

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Overview

Quantity:	100 µg
Target:	CD20 (MS4A1)
Protein Characteristics:	AA 1-297
Origin:	Cynomolgus
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This CD20 protein is labelled with His tag.

Product Details

Characteristics:	Cynomolgus CD20 / MS4A1 Full Length Protein, His Tag
Purity:	>90 % as determined by SDS-PAGE.
Endotoxin Level:	Less than 1.0 EU per µg by the LAL method.

Target Details

Target:	CD20 (MS4A1)
Alternative Name:	CD20 (MS4A1 Products)
Background:	B-lymphocyte antigen CD20 is also known as B-lymphocyte surface antigen B1, Leukocyte surface antigen Leu-16, Membrane-spanning 4-domains subfamily A member 1 and MS4A1, is an activated-glycosylated phosphoprotein expressed on the surface of all B-cells beginning at the pro-B phase (CD45R+, CD117+) and progressively increasing in concentration until maturity.

Target Details

CD20 is expressed on all stages of B cell development except the first and last, it is present from late pro-B cells through memory cells, but not on either early pro-B cells or plasma blasts and plasma cells. It is found on B-cell lymphomas, hairy cell leukemia, B-cell chronic lymphocytic leukemia, and melanoma cancer stem cells. The protein has no known natural ligand and its function is to enable optimal B-cell immune response, specifically against T-independent antigens. It is suspected that it acts as a calcium channel in the cell membrane. CD20 / MS4A1 is the target of the monoclonal antibodies (mAb) rituximab, Ibritumomab tiuxetan, and tositumomab, which are all active agents in the treatment of all B cell lymphomas and leukemias. Defects in CD20 / MS4A1 are the cause of immunodeficiency common variable type 5 (CVID5), 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.

Molecular Weight:	35.2 kDa
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NCBI Accession:	NP_001274241
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Application Details

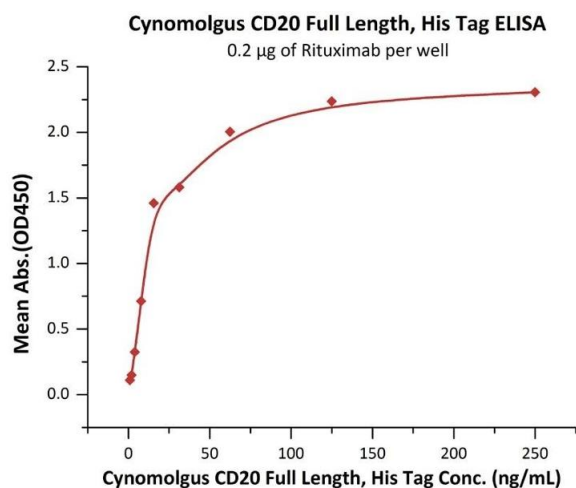
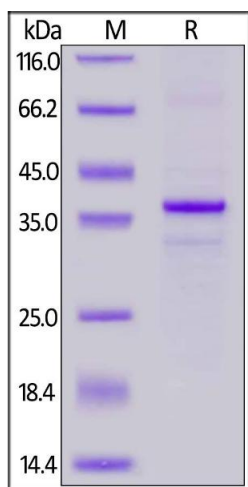
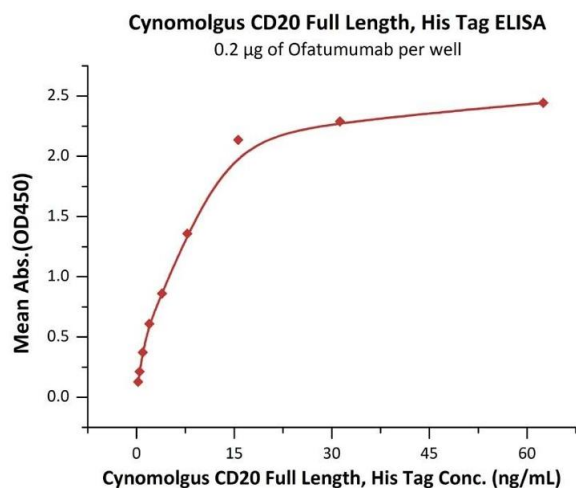
Restrictions:	For Research Use only
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Handling

Format:	Liquid
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Buffer:	50 mM HEPES, 150 mM NaCl, DDM, CHS, pH 7.5
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Storage:	-80 °C
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ELISA

Image 1. Measured by its binding ability in a functional ELISA. Immobilized Ofatumumab at 2 µg/mL (100 µL/well) can bind Cynomolgus CD20 Full Length, His Tag (ABIN6972969) with a linear range of 0.2-16 ng/mL (QC tested).

SDS-PAGE

Image 2. Cynomolgus CD20 Full Length, His Tag on under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 90 % .

ELISA

Image 3. Measured by its binding ability in a functional ELISA. Immobilized Rituximab at 2 µg/mL (100 µL/well) can bind Cynomolgus CD20 Full Length, His Tag (ABIN6972969) with a linear range of 1-31 ng/mL (QC tested).