

Datasheet for ABIN2180715
CD19 Protein (AA 20-291) (Fc Tag)[Go to Product page](#)

3 Images

2 Publications

Overview

| | |
|-------------------------------|--|
| Quantity: | 100 µg |
| Target: | CD19 |
| Protein Characteristics: | AA 20-291 |
| Origin: | Human |
| Source: | HEK-293 Cells |
| Protein Type: | Recombinant |
| Biological Activity: | Active |
| Purification tag / Conjugate: | This CD19 protein is labelled with Fc Tag. |

Product Details

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| Sequence: | AA 20-291 |
| Characteristics: | This protein carries a human IgG1 Fc tag at the C-terminus. The protein has a calculated MW of 56.3 kDa. The protein migrates as 56-66 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation. |
| Purity: | >95 % as determined by SDS-PAGE. |
| Sterility: | 0.22 µm filtered |
| Endotoxin Level: | Less than 0.1 EU per µg by the LAL method. |

Target Details

| | |
|---------|------|
| Target: | CD19 |
|---------|------|

Target Details

Alternative Name: CD19 ([CD19 Products](#))

Background: B-lymphocyte antigen CD19 is also known as CD19 (Cluster of Differentiation 19), is a single-pass type I membrane protein which contains two Ig-like C2-type (immunoglobulin-like) domains. CD19 is expressed on follicular dendritic cells and B cells. In fact, it is present on B cells from earliest recognizable B-lineage cells during development to B-cell blasts but is lost on maturation to plasma cells. It primarily acts as a B cell co-receptor in conjunction with CD21 and CD81. Upon activation, the cytoplasmic tail of CD19 becomes phosphorylated, which leads to binding by Src-family kinases and recruitment of PI-3 kinase. As on T cells, several surface molecules form the antigen receptor and form a complex on B lymphocytes. The (almost) B cell-specific CD19 phosphoglycoprotein is one of these molecules. The others are CD21 and CD81. These surface immunoglobulin (sIg)-associated molecules facilitate signal transduction. On living B cells, anti-immunoglobulin antibody mimicking exogenous antigen causes CD19 to bind to sIg and internalize with it. The reverse process has not been demonstrated, suggesting that formation of this receptor complex is antigen-induced. This molecular association has been confirmed by chemical studies. Mutations in CD19 are associated with severe immunodeficiency syndromes characterized by diminished antibody production. CD19 has been shown to interact with: CD81, CD82, Complement receptor 2, and VAV2.

Molecular Weight: 56.3 kDa

NCBI Accession: [NP_001761](#)

Pathways: [Fc-epsilon Receptor Signaling Pathway](#), [EGFR Signaling Pathway](#), [Neurotrophin Signaling Pathway](#)

Application Details

Restrictions: For Research Use only

Handling

Format: Lyophilized

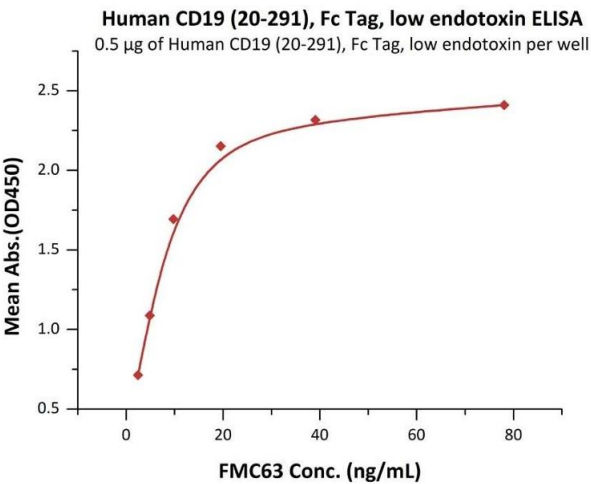
Buffer: PBS, pH 7.4

Handling Advice: Please avoid repeated freeze-thaw cycles.

Storage: -20 °C

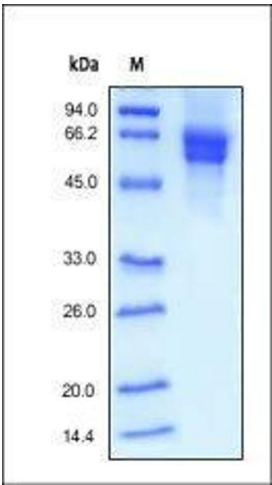
Storage Comment: No activity loss was observed after storage at: In lyophilized state for 1 year (4 °C), After reconstitution under sterile conditions for 3 months (-70 °C).

Product cited in: Kwon, Kim, Meyer, Di Bisceglie, Ray: "Distinct CD55 Isoform Synthesis and Inhibition of Complement-Dependent Cytolysis by Hepatitis C Virus." in: **Journal of immunology (Baltimore, Md. : 1950)**, Vol. 197, Issue 4, pp. 1127-36, (2017) ([PubMed](#)).



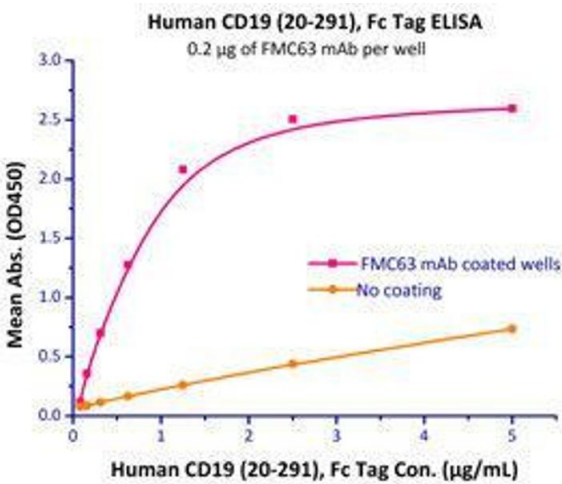
ELISA

Image 1. Immobilized Human CD19 (20-291), Fc Tag, low endotoxin (ABIN2180716,ABIN2180715) at 5 µg/mL (100 µL/well) can bind FMC63 with a linear range of 0.6-20 ng/mL (QC tested).



SDS-PAGE

Image 2. Human CD19 (20-291), Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.



Binding Studies

Image 3. Immobilized FMC63 mAb at 2 µg/mL (100 µL/well) can bind Human CD19 (20-291), Fc Tag (Cat# CD9-H5259) with a linear range of 0.15-1.25 µg/mL.