Datasheet for ABIN6253679

CD19 Protein (AA 20-291) (His tag)

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Overview

Quantity:	50 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 His tag.

Product Details

Sequence:	AA 20-291
Characteristics:	This protein carries a polyhistidine tag at the C-terminus. The protein has a calculated MW of 32.0 kDa. The protein migrates as 45-50 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.
Purity:	>90 % as determined by reduced SDS-PAGE.
Endotoxin Level:	Less than 1.0 EU per µg by the LAL method.

Target Details

Target:	CD19
Alternative Name:	CD19 (CD19 Products)

Target Details

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:	32.0 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

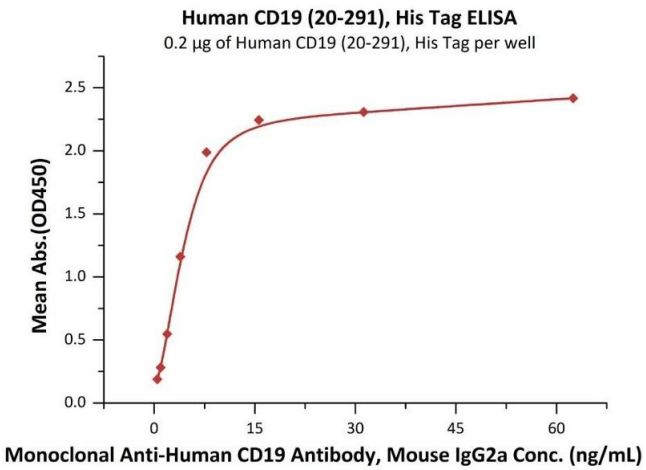
Publications

Product cited in:	Wu, Li, Xia, Tian, Kong, Wang, Gu, Zhang, Tu, Xie, Yang, Lu, Jiang, Ying: "Identification of Human

Publications

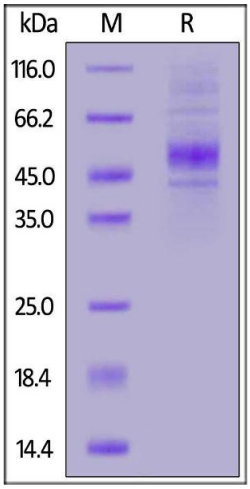
Single-Domain Antibodies against SARS-CoV-2." in: **Cell host & microbe**, (2020) (PubMed).

Images



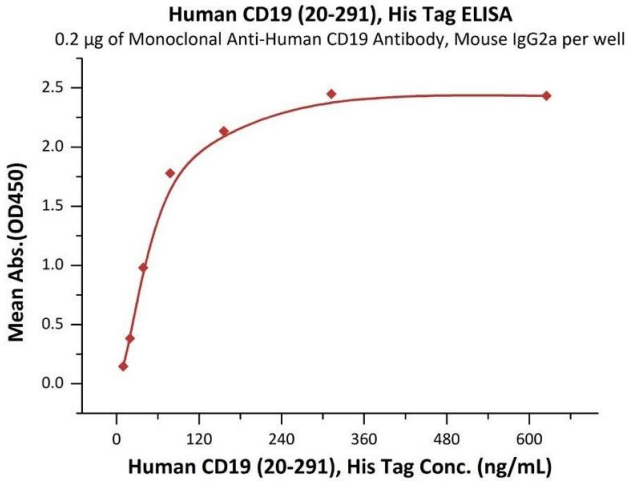
ELISA

Image 1. Immobilized Human CD19 (20-291), His Tag (ABIN5674620,ABIN6253679) at 5 μg/mL (100 μL/well) can bind FMC63 with a linear range of 0.2-8 ng/mL (QC tested).



SDS-PAGE

Image 2. Human CD19 (20-291) Protein, 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. Immobilized FMC63 MAb at 2 μg/mL (100 μL/well) can bind Human CD19 (20-291), His Tag (ABIN5674620,ABIN6253679) with a linear range of 0.039-0.313 μg/mL (QC tested).