

Datasheet for ABIN6972966

CD19 Protein (AA 20-291) (His tag,AVI tag,Biotin)[Go to Product page](#)**3** Images

Overview

Quantity:	200 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,AVI tag,Biotin.

Product Details

Specificity:	Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.
Characteristics:	Biotinylated Human CD19 (20-291) Protein, His,Avitag™ (SPR verified)
Purity:	>90 % as determined by SDS-PAGE.
Endotoxin Level:	Less than 1.0 EU per µg by the LAL method.

Target Details

Target:	CD19
Alternative Name:	CD19 (CD19 Products)
Background:	B-lymphocyte antigen CD19 is also known as CD19 (Cluster of Differentiation 19), is a single-

Target Details

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 (slg)-associated molecules facilitate signal transduction. On living B cells, anti-immunoglobulin antibody mimicking exogenous antigen causes CD19 to bind to slg 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:	33.7 kDa
NCBI Accession:	NP_001761
Pathways:	Fc-epsilon Receptor Signaling Pathway , EGFR Signaling Pathway , Neurotrophin Signaling Pathway

Application Details

Application Notes:	SPR verified
Comment:	<p>Ready-to-use Avitag™ biotinylated protein:</p> <p>The product is exclusively produced using the Avitag™ technology. Briefly, a unique 15 amino acid peptide, the Avi tag, is introduced into the recombinant protein during expression vector construction. The single lysine residue in the Avi tag is enzymatically biotinylated by the E. Coli biotin ligase BirA.</p> <p>This single-point enzymatic labeling technique brings many advantages for commonly used binding assays. The biotinylation happens on the lysine residue of Avi tag, and therefore does NOT interfere with the target protein's natural binding activities. In addition, when immobilized on an avidin-coated surface, the protein orientation is uniform because the position of the Avi tag in the protein is precisely controlled.</p>
Restrictions:	For Research Use only

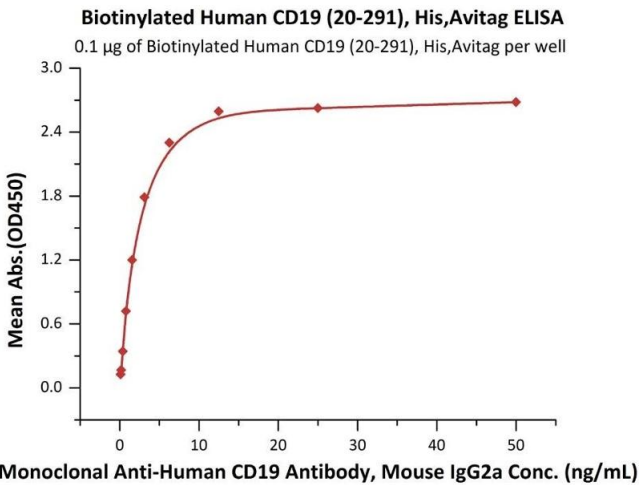
Handling

Format: Lyophilized

Buffer: PBS, pH 7.4

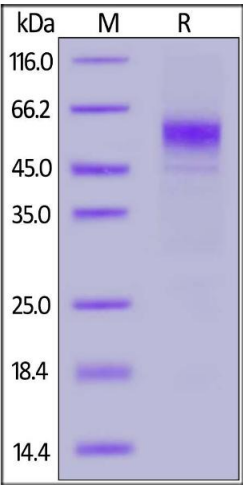
Storage: -20 °C

Images



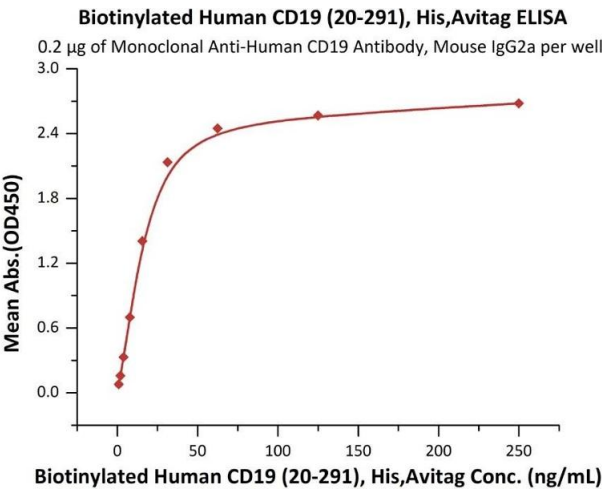
ELISA

Image 1. Immobilized Biotinylated Human CD19 (20-291), His,Avitag (ABIN6972966) at 1 µg/mL (100 µL/well) on Streptavidin precoated (0.5 µg/well) plate, can bind Monoclonal A CD19 Antibody, Mouse IgG2a with a linear range of 0.1-6 ng/mL (Routinely tested).



SDS-PAGE

Image 2. Biotinylated Human CD19 (20-291), His,Avitag 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 Monoclonal A CD19 Antibody, Mouse IgG2a at 2 µg/mL (100 µL/well) can bind Biotinylated Human CD19 (20-291), His,Avitag (ABIN6972966) with a linear range of 1-31 ng/mL (Routinely tested).