

Product Name: Biotinylated, Human CD19 Protein Dimer, His-Avi Tag

Product Code: BCSP-24125-03

FOR RESEARCH USE ONLY (RUO)

Protein Name: Biotinylated CD19

Alternate Name(s): B-Lymphocyte Surface Antigen B4, B4, CVID3, CD19 molecule, B-lymphocyte antigen CD19, T-Cell Surface Antigen Leu-12

Expression Host
HEK293T

Amino Acid Range
P20-K291

Protein Construct

CD19 protein dimer contains a CD19 extracellular domain (UniProt# P15391) fused with a proprietary cis-dimer motif followed by a tandem His-Avi tag at the C-terminus. Expressed in HEK293T cell line.

SDS-Page Molecular Weight

80 kDa. The migration range of the protein dimer with glycosylation under non-reducing condition is 120 to 190 kDa on SDS-PAGE.

Purity

Greater than 90% dimer form as determined by SDS-PAGE under non-reducing condition

Formulation

0.22µm filtered PBS, pH 7.4

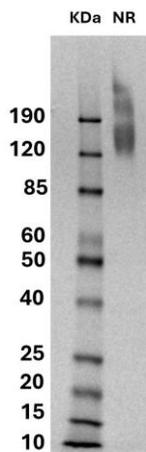
Stability & Storage

-80°C

Shipping Conditions

Frozen Dry Ice

SDS-PAGE

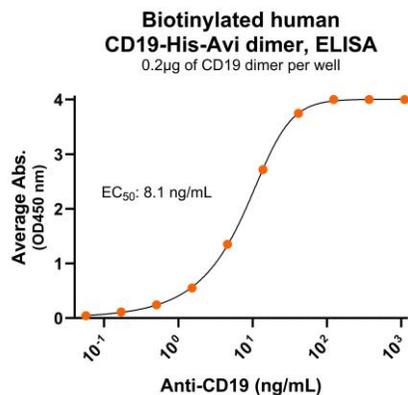


MW: Molecular Weight marker reduced condition

NR: CD19 dimer under non-reduced condition

The migration range of the protein dimer with glycosylation under non-reducing condition is 120 to 190 kDa on SDS-PAGE.

Antibody Binding



Immobilized biotinylated human CD19-His-Avi protein dimer (BCSP-24125-03) at 2 µg/mL (100 µL/well) can bind anti-human CD19 monoclonal antibody with half maximal effective concentration (EC50) range of 4-16.2 ng/mL (QC tested).

Background

Human Cluster of Differentiation 19 (CD19) is a Type I transmembrane glycoprotein in the immunoglobulin superfamily. CD19 is also known as B-Lymphocyte Surface Antigen B4, CVID3, B-lymphocyte antigen CD19, and T-Cell Surface Antigen Leu-12. CD19 is expressed on B cells throughout B cell development, but lost in plasma cells, and is also expressed on follicular dendritic cells. CD19 contains two extracellular C2-set Immunoglobulin-like (Ig-like) domains and a cytoplasmic tail that is highly conserved among mammalian species. CD19 can form multimolecular complexes with CD21 and CD81, but forming these complexes is not required for CD19 signal transduction. Mutations on CD19 are associated with severe immunodeficiency syndromes. CD19 is highly expressed on B cell cancers such as B cell lymphomas, acute lymphoblastic leukemia, and chronic lymphocytic leukemia. CD19 has become an attractive therapeutic target for leukemia immunotherapies.