

Human CD19 Protein, Ultra Low Endotoxin



Cat. No. CD1-HM119-UL

Description

Source	Recombinant Human CD19 Protein is expressed from HEK293 with His tag at the C-Terminus It contains Pro20-Lys291.
Accession	P15391-1
Molecular Weight	The protein has a predicted MW of 34.7 kDa. Due to glycosylation, the protein migrates to 50-60 KDa based on Bis-Tris PAGE result.
Endotoxin	Less than 0.01 EU per µg by the LAL method.
Purity	>95% as determined by Bis-Tris PAGE

Formulation and Storage

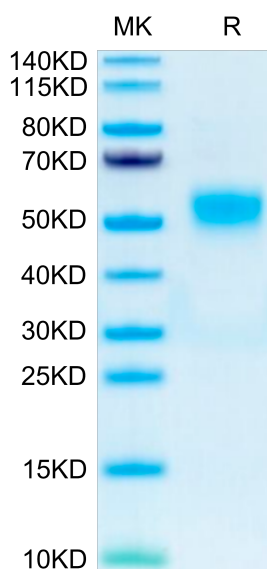
Formulation	Lyophilized from 0.22 µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.
Storage	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Background

CD19 is a 95 kDa transmembrane glycoprotein that plays a central role in B cell activation and humoral immune responses. Functions as coreceptor for the B-cell antigen receptor complex (BCR) on B-lymphocytes. Decreases the threshold for activation of downstream signaling pathways and for triggering B-cell responses to antigens. Activates signaling pathways that lead to the activation of phosphatidylinositol 3-kinase and the mobilization of intracellular Ca²⁺ stores.

Assay Data

Bis-Tris PAGE

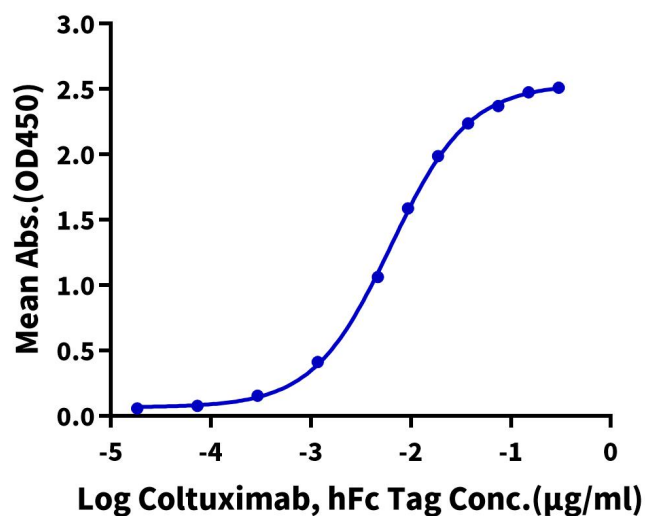


Human CD19 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

ELISA Data

Human CD19, His Tag ELISA

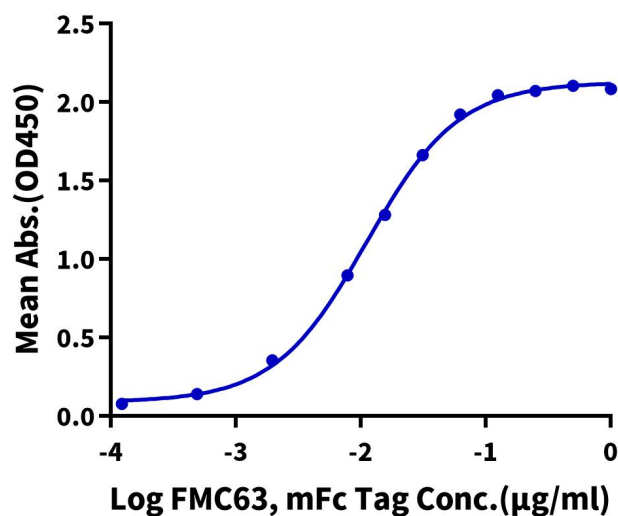
0.2µg Human CD19, His Tag Per Well



Immobilized Human CD19, His Tag at 2 µg/ml (100 µl/Well) on the plate. Dose response curve for Coltuximab, hFc Tag with the EC50 of 6.3 ng/ml determined by ELISA (QC Test).

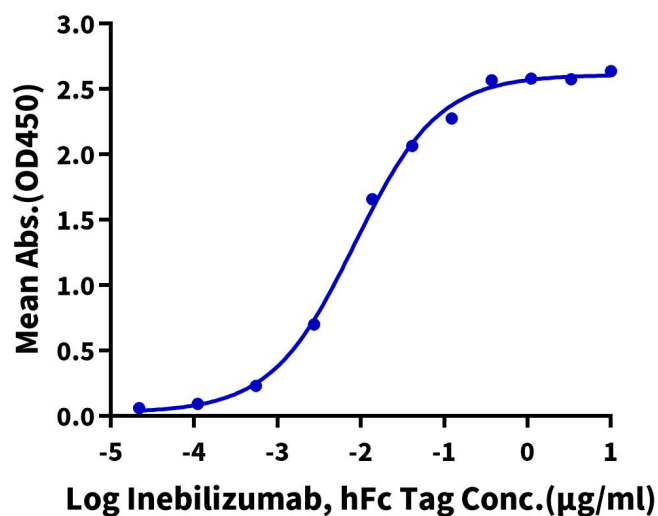
Human CD19, His Tag ELISA

0.2µg Human CD19, His Tag Per Well

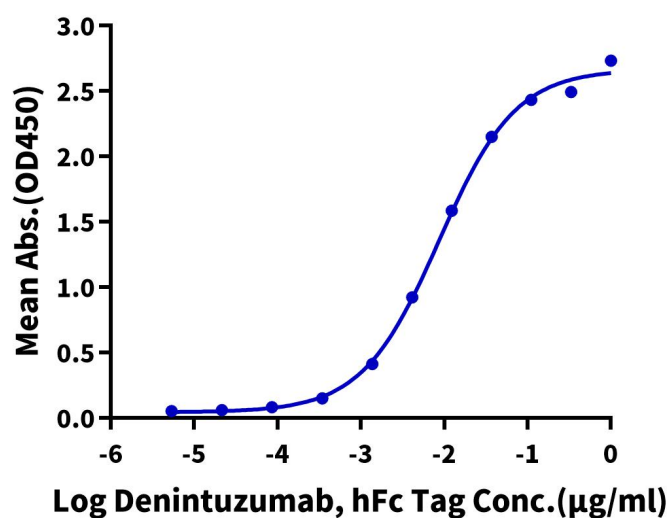


Immobilized Human CD19, His Tag at 2 µg/ml (100 µl/well) on the plate. Dose response curve for FMC63, mFc Tag with the EC50 of 11.1 ng/ml determined by ELISA (QC Test).

Assay Data

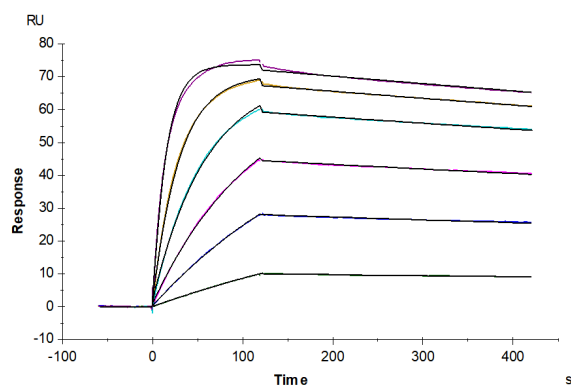
Human CD19, His Tag ELISA0.1 μ g Human CD19, His Tag Per Well

Immobilized Human CD19, His Tag at 1 μ g/ml (100 μ l/Well) on the plate. Dose response curve for Inebilizumab, hFc Tag with the EC50 of 8.5 ng/ml determined by ELISA.

Human CD19, His Tag ELISA0.1 μ g Human CD19, His Tag Per Well

Immobilized Human CD19, His Tag at 1 μ g/ml (100 μ l/well) on the plate. Dose response curve for Denintuzumab, hFc Tag with the EC50 of 8.6 ng/ml determined by ELISA.

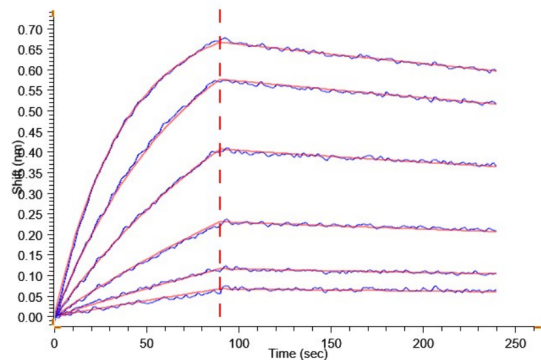
SPR Data



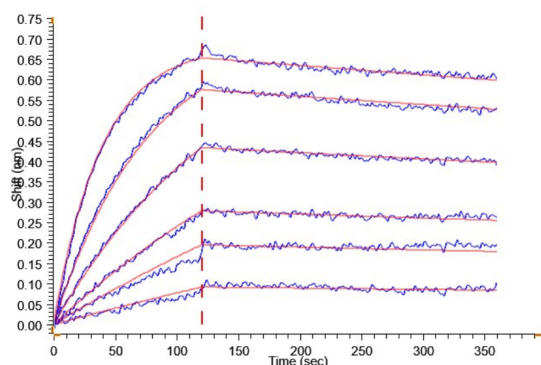
Anti-CD19 Antibody, hFc Tag captured on CM5 Chip via Protein A can bind Human CD19, His Tag with an affinity constant of 0.50 nM as determined in SPR assay (Biacore T200).

BLI Data

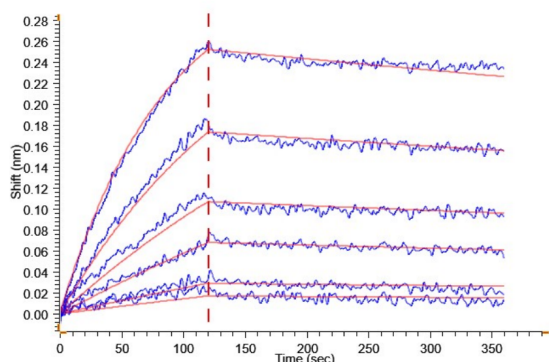
Assay Data



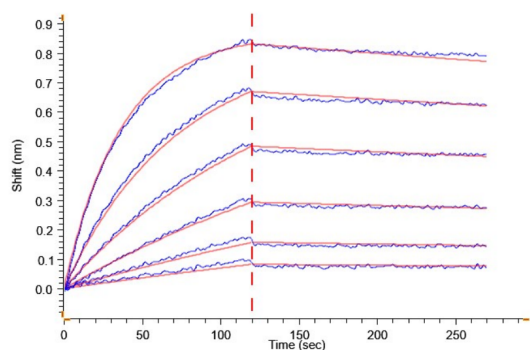
Loaded Coltuximab on ProA-Biosensor can bind Human CD19, His Tag with an affinity constant of 5.65 nM as determined in BLI assay .



Loaded FMC63 on MFC-Biosensor can bind Human CD19, His Tag with an affinity constant of 1.44 nM as determined in BLI assay .



Loaded Inebilizumab on ProA-Biosensor can bind Human CD19, His Tag with an affinity constant of 8.03 nM as determined in BLI assay .



Loaded Denintuzumab, hFc Tag on ProA-Biosensor, can bind Human CD19, His Tag with an affinity constant of 3.73 nM as determined in BLI assay (Gator).