

Synonym

CDW52,HE5,CD52,CAMPATH-1 antigen

Source

Biotinylated Human CD52, His, Avitag(CD2-H82E8) is expressed from human 293 cells (HEK293). It contains AA Gly 25 - Ser 36 (Accession # P31358-1).

Molecular Characterization



This protein carries a polyhistidine tag at the C-terminus, followed by an Avi tag (AvitagTM).

The protein has a calculated MW of 13.5 kDa. The protein migrates as 16 kDa and 17-22 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Labeling

Biotinylation of this product is performed using AvitagTM technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.

Protein Ratio

Passed as determined by the HABA assay / binding ELISA.

Purity

>90% as determined by SDS-PAGE.

Formulation

Lyophilized from $0.22~\mu m$ filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

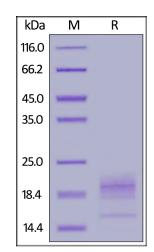
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE

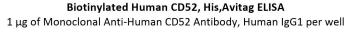


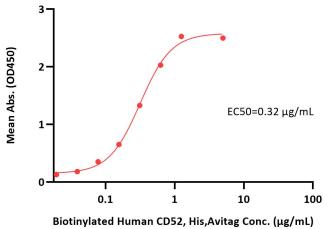
Biotinylated Human CD52, His, Avitag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

Bioactivity-ELISA



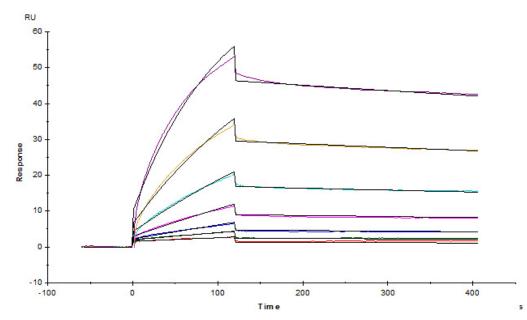






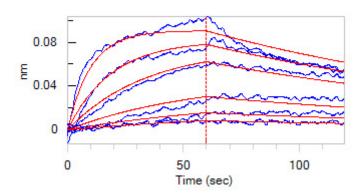
Immobilized Monoclonal Anti-Human CD52 Antibody, Human IgG1 at 10 μ g/mL (100 μ L/well) can bind Biotinylated Human CD52, His,Avitag (Cat. No. CD2-H82E8) with a linear range of 0.005-0.625 μ g/mL (QC tested).

Bioactivity-SPR



Anti-Human CD52 MAb (Human IgG1) captured on CM5 chip via anti-human IgG Fc antibodies surface can bind Biotinylated Human CD52, His,Avitag (Cat. No. CD2-H82E8) with an affinity constant of 71.8 nM as determined in a SPR assay (Biacore T200) (Routinely tested).

Bioactivity-BLI



Loaded Biotinylated Human CD52, His, Avitag (Cat. No. CD2-H82E8) on SA Biosensor, can bind Anti-Human CD52 MAb (Human IgG1) with an affinity



Biotinylated Human CD52 Protein, His,Avitag™

Catalog # CD2-H82E8



constant of 137 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

Background

CAMPATH-1 antigen, also known as cluster of differentiation 52 (CD52), is a glycoprotein that in humans is encoded by the CD52 gene. It is widely expressed on the cell surface of immune cells, such as mature lymphocytes, natural killer cells (NK), eosinophils, neutrophils, monocytes/macrophages, and dendritic cells (DCs). ligation of cell surface CD52 molecules may offer costimulatory signals for T-cell activation and proliferation.

