

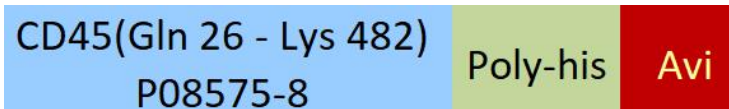
Synonym

CD45,PTPRC,L-CA,T200

Source

Biotinylated Human CD45 / PTPRC Protein, His,Avitag(CD5-H82E8) is expressed from human 293 cells (HEK293). It contains AA Gln 26 - Lys 482 (Accession # [P08575-8](#)).

Predicted N-terminus: Gln 26

Molecular Characterization

This protein carries a human IgG1 Fc tag at the C-terminus, followed by an Avi tag (Avitag™)

The protein has a calculated MW of 54.9 kDa. The protein migrates as 120-150 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under reducing (R) condition (SDS-PAGE) due to glycosylation.

Labeling

Biotinylation of this product is performed using Avitag™ 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.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>90% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 µm 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.

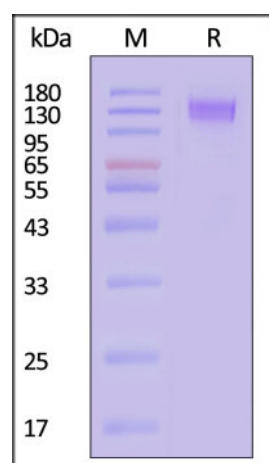
Storage

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 CD45 / PTPRC Protein, 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% (With [Star Ribbon Pre-stained Protein Marker](#)).

Background

CD45 is a receptor protein tyrosine phosphatase, also known as Ly-5 or leukocyte common antigen. CD45 mainly involves in the initiation of T cell receptor signaling by controlling the activation of the Src family protein-tyrosine kinases Lck and Fyn. CD45 deficiency causes in T- and B-lymphocyte dysfunction in the form of severe combined immune deficiency. It also takes a significant role in autoimmune diseases and cancer as well as in infectious diseases including fungal infections.

Clinical and Translational Updates

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.