

Synonym

CD45,PTPRC,L-CA,T200

Source

Human CD45, His Tag(CD5-H52H8) is expressed from human 293 cells (HEK293). It contains AA Gln 26 - Lys 577 (Accession # P08575-3).

Molecular Characterization

CD45(Gln 26 - Lys 577) P08575-3

Poly-his

This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 62.8 kDa. The protein migrates as 120-170 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per μg by the LAL method / rFC method.

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

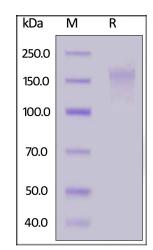
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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



Human CD45, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

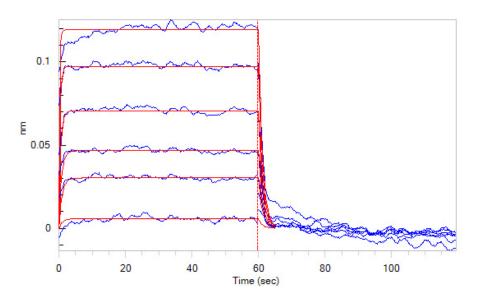
Bioactivity-BLI



Human CD45 / PTPRC protein, His Tag

Catalog # CD5-H52H8





Loaded Human CD45, His Tag (Cat. No. CD5-H52H8) on HIS1K Biosensor, can bind Human Galectin-1, Tag Free (Cat. No. GA1-H4113) with an affinity constant of $3.0~\mu\text{M}$ as determined in BLI assay (ForteBio Octet Red96e) (QC tested).

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.

