

Rev04
 Update: Aug,20,2025

DATASHEET

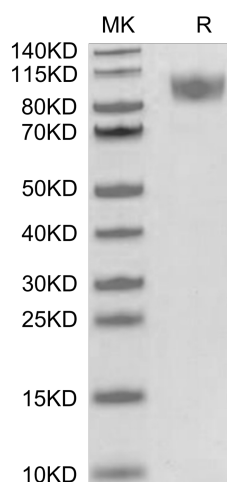
CD45/PTPRC[Biotin], His & Avi, Human

Cat. No.: Z04428

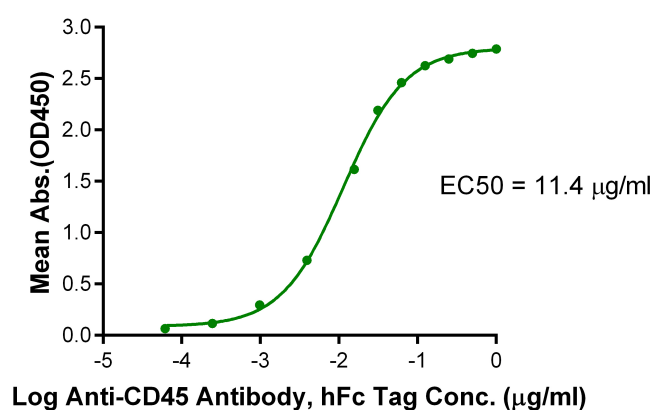
Product Introduction

Species	Human
Protein Construction	CD45/PTPRC (Gln26-Lys416) Accession # P08575-4 His Avi N-termC-term
Conjugate	Biotin
Purity	> 95% as determined by BisTris PAGE
Endotoxin Level	Less than 1EU per µg by the LAL method.
Biological Activity	Measured by its binding ability in a functional ELISA. Test result was comparable to standard batch.
Expression System	HEK293
Theoretical Molecular Weight	47.3 kDa
Apparent Molecular Weight	Due to glycosylation, the protein migrates to 80-110 kDa based on Bis-Tris PAGE result.
Formulation	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4).
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
Storage & Stability	Upon receiving, the product remains stable for 6 months at -20°C or below. Upon reconstitution, the product should be stable for 3 months at -80°C. Avoid repeated freeze-thaw cycles.

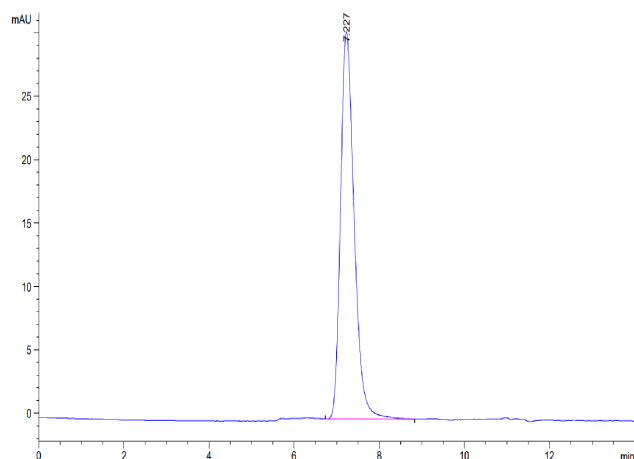
Examples



CD45/PTPRC[Biotin], His & Avi, Human on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.



Immobilized CD45/PTPRC[Biotin], His & Avi, Human, His Tag at 1 μg/ml (100 μl/well) on the streptavidin precoated plate(5 μg/ml). Dose response curve for Anti-CD45 Antibody, hFc Tag with the EC50 of 11.4ng/ml determined by ELISA.



The purity of CD45/PTPRC[Biotin], His & Avi, Human is greater than 95% as determined by SEC-HPLC.

Background

Target Background : PTPRC (also known as CD45), T cells require the protein tyrosine phosphatase CD45 to detect and respond to antigen because it activates the Src family kinase Lck, which phosphorylates the T cell antigen receptor (TCR) complex. CD45 activates Lck by opposing the negative regulatory kinase Csk. Paradoxically, CD45 has also been implicated in suppressing TCR signaling by dephosphorylating the same signaling motifs within the TCR complex upon which Lck acts.

Synonyms : L-CA; CD45; T200; PTPRC; B220; CD45R; GP180; LCA; LY5; EC 3.1.3.48

For research use only. Not intended for human or animal clinical trials, therapeutic or diagnostic use.

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