Product Name: Recombinant Human CD45RA (C-6His)

Catalog #: PHH2322



Summary

Name CD45RA/CD45/PTPRC/Receptor-type tyrosine-protein phosphatase C

Purity Greater than 95% as determined by reducing SDS-PAGE

Endotoxin level <1 EU/μg as determined by LAL test.

Construction Recombinant Human Receptor-type Tyrosine-protein Phosphatase C is

produced by our Mammalian expression system and the target gene

encoding Gln26/xadLys482 is expressed with a 6His tag at the C-terminus.

Accession # P08575-8

Host Human Cells

Species Human

Predicted Molecular Mass 52.1 KDa

Formulation Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4.

Shipping The product is shipped at ambient temperature. Upon receipt, store it

immediately at the temperature listed below.

Stability&Storage Store at \leq -70°C, stable for 6 months after receipt. Store at \leq -70°C, stable for 3

months under sterile conditions after opening. Please minimize freeze-thaw

cycles.

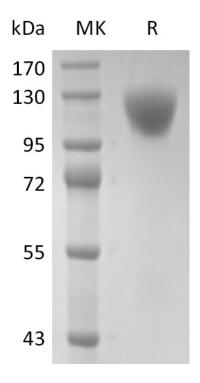
Reconstitution Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is

not recommended to reconstitute to a concentration less than 100µg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles. Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100µg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

SDS-PAGE image

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Alternative Names

B220; CD45 antigen; CD45; CD45R; LCA; L-CA; LY5; protein tyrosine phosphatase, receptor type, C; PTPRC; receptor-type tyrosine-protein phosphatase C

Background

Protein tyrosine phosphatase, receptor type C (CD45), also known as PTPRC is a member of the protein tyrosine phosphatase (PTP) family which is known for its function to serve as signaling molecules and to regulate a variety of cellular processes such as cell proliferation, differentiation, mitotic cycle and oncogenic transformation. It is a variably glycosylated 180-220 kDa transmembrane protein that is abundantly expressed on all nucleated cells of hematopoietic origin. CD45 has several isoforms, expressed according to cell type, developmental stage and antigenic exposure. CD45 has been best studied in T cells, where it determines T cell receptor signaling thresholds. CD45 is moved into or out of the immunological synapse (IS) membrane microdomain depending on the relative influence of interaction with the extracellular galectin lattice or the intracellular actin cytoskeleton. Galectin interaction can be fine-tuned by varying usage of the heavily O-glycosylated spliced regions and sialylation of N-linked carbohydrates. Within the IS, CD45 dephosphorylates and negatively regulates the src family kinase, LCK. In other leukocytes, CD45 influences differentiation and links immunoreceptor signaling with cytokine secretion and cell survival, partially overlapping in function with DEP-1/CD148. CD45 deletion causes in severe immunodeficiency, while point mutations may be associated with autoimmune disorders.

Note

For Research Use Only, Not for Diagnostic Use.