

Recombinant Human CD5 / Cluster of Differentiation 5 Protein (His Tag)

Catalog Number: PDEH100950

Note: Centrifuge before opening to ensure complete recovery of vial contents.

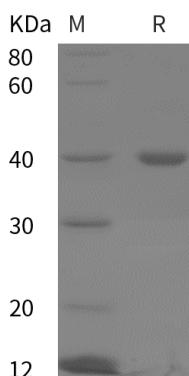
Description

Species	Human
Source	E.coli-derived Human CD5 protein Arg25-Pro372, with an N-terminal His
Calculated MW	38.2 kDa
Observed MW	41 kDa
Accession	P06127
Bio-activity	Not validated for activity

Properties

Purity	> 95% as determined by reducing SDS-PAGE.
Endotoxin	< 10 EU/mg of the protein as determined by the LAL method
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with 5% Trehalose and 5% Mannitol.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis.

Data



SDS-PAGE analysis of Human CD5 / Cluster of Differentiation 5 proteins, 2 µg/lane of Recombinant Human CD5 / Cluster of Differentiation 5 proteins was resolved with SDS-PAGE under reducing conditions, showing bands at 41 kDa.

Background

For Research Use Only

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The cluster of differentiation (CD) system is commonly used as cell markers in immunophenotyping. Different kinds of cells in the immune system can be identified through the surface CD molecules which associating with the immune function of the cell. There are more than 320 CD unique clusters and subclusters have been identified. Some of the CD molecules serve as receptors or ligands important to the cell through initiating a signal cascade which then alter the behavior of the cell. Some CD proteins do not take part in cell signal process but have other functions such as cell adhesion. CD5 is a member of the CD system. CD5 was found to be widely distributed in T-cells and B1 cells which is a subset of IgM-secreting B cells. CD5 also was found expressed in small lymphocytic lymphoma, hairy cell leukaemia and mantle cell lymphoma cells. CD5 serves to weaken the activating stimulus from the BCR so that the B1 cells can only reflect to the very strong stimuli but not the normal tissue proteins.