## Recombinant Rat CD5 / Cluster of Differentiation 5 protein (His Tag)

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

Catalog Number: PDER100234



Description Species Rat Source E.coli-derived Rat CD5 protein Ser25-Pro368, with an N-terminal His Mol Mass 37.7 kDa P51882 Accession **Bio-activity** Not validated for activity **Properties** >95% as determined by reducing SDS-PAGE. Purity 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  $< -20^{\circ}$ C for 3 months. Shipping This product is provided as lyophilized powder which is shipped with ice packs. Lyophilized from a 0.2 µm filtered solution in PBS with 5% Trehalose and 5% Formulation 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.

KDa	M R
80	
60	-
40	
30	-
20	-

> 95 % as determined by reducing SDS-PAGE.

## Background

Data

The cluster of differentiation (CD) system is commonly used as cell markers in immunophynotyping. 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.

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