



Recombinant Protein Technical Manual

Recombinant Rat CD5 Protein (His Tag)(Active)

RPES3860

Product Data:

Product SKU: RPES3860

Size: 50µg

Species: Rat

Expression host: HEK293 Cells

Uniprot: P51882

Protein Information:

Molecular Mass: 38.9 kDa

AP Molecular Mass: 46-49 kDa

Tag: C-His

Bio-activity: Immobilized rat CD5-His at 10 µg/ml (100 µl/well) can bind biotinylated human GST-LCK (Cat: PKSH030426), The EC50 of biotinylated human GST-LCK is 0.9-2.1 µg/ml.

Purity: > 95 % as determined by SDS-PAGE

Endotoxin: < 1.0 EU per µg of the protein as determined by the LAL method

Storage: 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 sterile PBS, pH 7.4

Reconstitution: Please refer to the printed manual for detailed information.

Application: Functional ELISA

Synonyms: CD5

Immunogen Information:

Sequence: Met1-Pro368

Background:

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.