



Recombinant Protein Technical Manual

Recombinant Human CD21/CR2/C3DR Protein (His Tag)(Active)

RPES0763

Product Data:

Product SKU: RPES0763

Size: 50µg

Species: Human

Expression host: HEK293 Cells

Uniprot: P20023

Protein Information:

Molecular Mass: 106 kDa

AP Molecular Mass: 11020 kDa

Tag: C-His

Bio-activity: Measured by its binding ability in a functional ELISA. Immobilized human CD21 at 2 µg/ml (100 µl/well) can bind biotinylated human CD9. The EC50 of biotinylated human CD9 is 1.76 µg/ml.

Purity: > 95 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg 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: C3DR;CD21;CR;CVID7;SLEB9

Immunogen Information:

Sequence: Met 1-Arg 971

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 associate 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 alters the behavior of the cell. Some CD proteins do not take part in cell signal process but have other functions such as cell adhesion. CD21, also known as Complement component (3d / Epstein Barr virus) receptor 2 and CR2, is a member of the CD system and is a protein involved in complement system. CD21 is present on all mature B-cells and some T-cells and follicular dendritic cells. CD21 on mature B-cells form a complex called the B cell receptor complex with two other membrane proteins, CD19 and CD81. CD21 has a function in the complement system through serving as the cellular receptor specific for ligands such as C3 and C4 which can be attached to foreign macromolecules in order to remove or uptake them. This results in B-cells having enhanced response to the antigen.