



Recombinant Protein Technical Manual

Recombinant Rat CD23 Protein (Fc Tag)

RPES4907

Product Data:

Product SKU: RPES4907

Size: 50µg

Species: Rat

Expression host: HEK293 Cells

Uniprot: Q6AZ45

Protein Information:

Molecular Mass: 60.2 kDa

AP Molecular Mass: 61 kDa

Tag: N-Fc

Bio-activity:

Purity: > 90 % 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:

Synonyms: FCER2;Fcer2a

Immunogen Information:

Sequence: Glu50-Pro331

Background:

Fc fragment of IgE, low affinity II, receptor for (CD23) or CD23 antigen is a member of the cluster of differentiation family. The cluster of differentiation (cluster of designation) (often abbreviated as CD) is a protocol used for the identification and investigation of cell surface molecules present on white blood cells initially but found in almost any kind of cell of the body, providing targets for immunophenotyping of cells. Physiologically, CD molecules can act in numerous ways, often acting as receptors or ligands (the molecule that activates a receptor) important to the cell. A signal cascade is usually initiated, altering the behavior of the cell (see cell signaling). Some CD proteins do not play a role in cell signaling, but have other functions, such as cell adhesion. CD23/FCER2 is a B-cell specific antigen, and a low-affinity receptor for IgE. It has essential roles in B cell growth and differentiation, and the regulation of IgE production. This protein also exists as a soluble secreted form, then functioning as a potent mitogenic growth factor. Increased levels of soluble CD23/FCER2 cause the recruitment of non-sensitised B-cells in the presentation of antigen peptides to allergen-specific B-cells, therefore increasing the production of allergen specific IgE. IgE, in turn, is known to upregulate the cellular expression of CD23 and Fc epsilon RI (high-affinity IgE receptor).