## Recombinant Rat CD23 Protein (Fc Tag)

## Catalog Number: PKSR030317

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

Description		
Species	Rat	
Source	HEK293 Cells-derived Rat CD23 protein Glu50-Pro331, with an N-terminal hFc	
Calculated MW	60.2 kDa	
Observed MW	61 kDa	
Accession	Q6AZ45	
Bio-activity	Not validated for activity	
Properties		
Purity	> 90 % as determined by reducing SDS-PAGE.	
Endotoxin	< 1.0 EU per µg 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.	
Formulation	Lyophilized from sterile PBS, PH 7.4	
	Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants	
	before lyophilization.	
	Please refer to the specific buffer information in the printed manual.	
Reconstitution	Please refer to the printed manual for detailed information.	



KDa	М
116	
66.2	
45.0	-
35.0	
25.0	-
18.4 14.4	-

> 90 % as determined by reducing SDS-PAGE.

## Background

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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 signalin g, 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-cell s, 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).