

Recombinant Human CD23 Protein(Fc Tag)

Catalog Number: PDMH100190

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

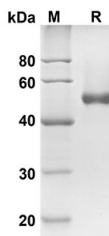
Description

Species	Human
Source	Mammalian-derived Human FcER2 protein Met150-Ser321, with an C-terminal Fc
Calculated MW	43.8 kDa
Observed MW	50 kDa
Accession	P06734
Bio-activity	Not validated for activity

Properties

Purity	> 90% as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 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°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with 5% Trehalose and 5% 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.

Data



SDS-PAGE analysis of Human CD23 proteins, 2 µg/lane of Recombinant Human CD23 proteins was resolved with SDS-PAGE under reducing conditions, showing bands at 43.8 KD

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-sensitized 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).