

Human CellExp CD23, human recombinant protein

FCER2; FCER-2; CD23; CD-23; CD23A; CD-23A; CLEC4J; FCE2; FCE-2; IGEBF; FcERII;

FceRII; Fc epsilon RII Catalog # PBV11056r

Specification

Human CellExp CD23, human recombinant protein - Product info

Primary Accession <u>P06734</u>

Calculated MW

This protein is fused with a fused with 6×his tag at the N-terminus and has a

calculated MW of 33.2 kDa expressed. The predicted N-terminus is Asp48. Protein migrates as 40-44 kDa in reduced SDS-PAGE resulting from glycosylation.

KDa

Human CellExp CD23, human recombinant protein - Additional Info

Gene ID 2208
Gene Symbol FCER2

Other Names

FCER2; FCER-2; CD23; CD-23; CD23A; CD-23A; CLEC4J; FCE2; FCE-2; IGEBF; FcERII; Fc

epsilon RII

Gene Source Human
Source HEK293 cells
Assay&Purity SDS-PAGE; ≥95%

Assay2&Purity2 N/A; Recombinant Yes

Results Measured by its binding ability in a

functional ELISA. Immobilized rhCD23 at 2 μ g/ml (100 μ l/well) can bind human IgE with a linear range of 0.01-1.2 μ g/ml.

Target/Specificity

CD23

Application Notes

Centrifuge the vial prior to opening. Reconstitute in sterile PBS, pH 7.4 to a concentration of 50 μ g/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 month. For extended storage, it is recommended to store at -20°C.

Format

Lyophilized

Storage

-20°C; Lyophilized from 0.22 μm filtered solution in PBS, pH7.4. Normally Mannitol or Trehalose is added as protectants before lyophilization.



Human CellExp CD23, human recombinant protein - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

Human CellExp CD23, human recombinant protein - Images

Human CellExp CD23, human recombinant protein - Background

Cluster of differentiation 23 (CD23), also known as Low affinity immunoglobulin epsilon Fc receptor (FCER2), C-type lectin domain family 4 member J (CLEC4J), Fc-epsilon-RII (FcɛRII), Immunoglobulin E-binding factor (IGEBF), is the "low-affinity" receptor for IgE, an antibody isotype involved in allergy and resistance to parasites, and is important in regulation of IgE levels. Unlike many of the antibody receptors, CD23 is a C-type lectin. It is found on mature B cells, activated macrophages, eosinophils, follicular dendritic cells, and platelets. There are two forms of CD23: CD23a and CD23b. CD23a is present on follicular B cells, whereas CD23b requires IL-4 to be expressed on T-cells, monocytes, Langerhans cells, eosinophils, and macrophages. CD23 is known to have role of transportation in antibody feedback regulation. Antigen that enters the blood stream is captured by antigen specific IgE antibodies. The IgE immune complexes that are formed bind to CD23 molecules on B cells, and are transported to the B cell follicles of the spleen. The antigen is then transferred from CD23+ B cells to CD11c+ antigen presenting cells. The CD11c+ cells in turn present the antigen to CD4+ T cells, which can lead to an enhanced antibody response. In flow cytometry, CD23 is helpful in the differentiation of chronic lymphocytic leukemia (CD23-positive) from mantle cell leukemia (CD23-negative).

Human CellExp CD23, human recombinant protein - References

Ikuta K.,et al.Proc. Natl. Acad. Sci. U.S.A. 84:819-823(1987). Kikutani H.,et al.Cell 47:657-665(1986). Luedin C.,et al.EMBO J. 6:109-114(1987). Grimwood J.,et al.Nature 428:529-535(2004). Yokota A.,et al.Cell 55:611-618(1988).