## Human CellExp™ CD23, human recombinant

**CATALOG #**: 7435-10 10 μg 7435-50 50 μg

ALTERNATE NAMES:

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

FcεR II; Fc epsilon RII

**SOURCE:** HEK 293 cells (Asp 48 – Ser 321)

**PURITY:** ≥ 95% by SDS-PAGE gel

**MOL. WEIGHT:** This protein is fused with a fused with 6xhis 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.

ENDOTOXIN LEVEL: <1 EU/µg by LAL method

FORM: Lyophilized

**FORMULATION:** Lyophilized from  $0.22~\mu m$  filtered solution in PBS, pH7.4. Normally Mannitol or Trehalose is added as protectants before lyophilization.

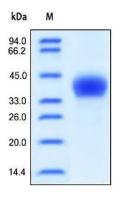
**STORAGE CONDITIONS:** Store at -20°C. After reconstitution, aliquot and store at -20°C and use within 3 months. Avoid repeated freezing and thawing cycles.

**RECONSTITUTION:** Centrifuge the vial prior to opening. Reconstitute in sterile PBS, pH 7.4 to a concentration of 50  $\mu$ 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.

**DESCRIPTION**: 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).

**BIOLOGICAL ACTIVITY:** Measured by its binding ability in a functional ELISA. Immobilized rhCD23 at 2  $\mu$ g/ml (100  $\mu$ l/well) can bind human IgE with a linear range of 0.01-1.2  $\mu$ g/ml.



Human recombinant CD23

## **RELATED PRODUCTS:**

- Human CellExp™ CD223, human recombinant (Cat. No. 7278-10, -50)
- Human CellExp™ CD71, human recombinant (Cat. No. 7279-10, -50)
- Human CellExp™ CD273, human recombinant (Cat. No. 7369-10, -50)
- Human CellExp™ CD33, human recombinant (Cat. No. 7370-10, -50)
- Human CellExp™ CD36, human recombinant (Cat. No. 7371-10, -50)
- Human CellExp™ CD87, human recombinant (Cat. No. 7372-20, -100)
- Human CellExp™ CD360, human recombinant (Cat. No. 7373-20, -100)
- Human CellExp™ CD244, human recombinant (Cat. No. 7374-10, -50)
- Human CellExp™ CD304, human recombinant (Cat. No. 7375-10)
- Human CellExp™ CD319, human recombinant (Cat. No. 7376-10, -50)
- Human CellExp™ CD306, human recombinant (Cat. No. 7377-10, -50)
- Human CellExp<sup>™</sup> CD84, human recombinant (Cat. No. 7378-10, -50)

FOR RESEARCH USE ONLY! Not to be used in humans.

