Datasheet for ABIN5674588

FCER2 Protein (AA 48-321) (His tag,AVI tag,Biotin)

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2 Images

Overview

Quantity:	200 µg
Target:	FCER2
Protein Characteristics:	AA 48-321
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This FCER2 protein is labelled with His tag,AVI tag,Biotin.

Product Details

Brand:	PrecisionAvi
Sequence:	AA 48-321
Specificity:	Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.
Characteristics:	This protein carries a polyhistidine tag at the N-terminus, followed by an Avi tag (Avitag™). The protein has a calculated MW of 34.2 kDa. The protein migrates as 40-46 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.
Purity:	>95 % as determined by reduced SDS-PAGE.
Endotoxin Level:	Less than 1.0 EU per µg by the LAL method.

Target Details

Target:	FCER2
Alternative Name:	CD23 (FCER2 Products)
Background:	Cluster of differentiation 23 (CD23) is also known as Low affinity immunoglobulin epsilon Fc receptor (FCER2), C-type lectin domain family 4 member J (CLEC4J), Fc-epsilon-RII (FcεRII), 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).
Molecular Weight:	34.2 kDa
Pathways:	Regulation of Leukocyte Mediated Immunity, Positive Regulation of Immune Effector Process

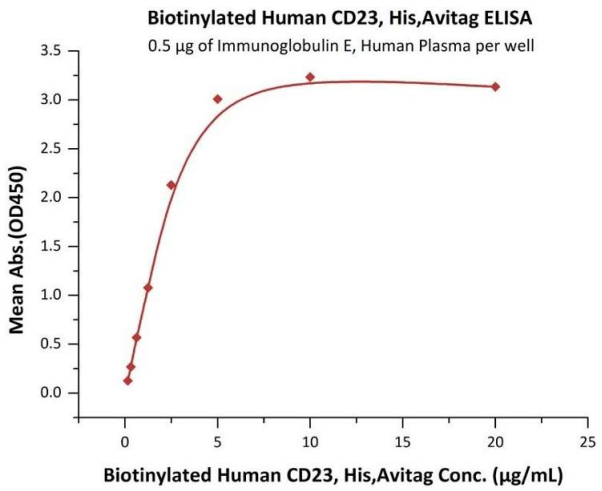
Application Details

Comment:	Ready-to-use AvitagTM biotinylated protein: The product is exclusively produced using the AvitagTM technology. Briefly, a unique 15 amino acid peptide, the Avi tag, is introduced into the recombinant protein during expression vector construction. The single lysine residue in the Avi tag is enzymatically biotinylated by the E. Coli biotin ligase BirA. This single-point enzymatic labeling technique brings many advantages for commonly used binding assays. The biotinylation happens on the lysine residue of Avi tag, and therefore does NOT interfere with the target protein's natural binding activities. In addition, when immobilized on an avidin-coated surface, the protein orientation is uniform because the position of the Avi tag in the protein is precisely controlled.
Restrictions:	For Research Use only

Handling

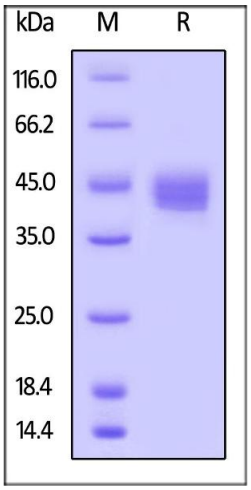
Format:	Lyophilized
Buffer:	PBS, pH 7.4
Handling Advice:	Please avoid repeated freeze-thaw cycles.
Storage:	-20 °C

Images



ELISA

Image 1. Immobilized Immunoglobulin E, Human Plasma at 5 µg/mL (100 µL/well) can bind Biotinylated Human CD23, His,Avitag (ABIN5674588,ABIN6253699) with a linear range of 0.156-2.5 µg/mL (QC tested).



SDS-PAGE

Image 2. Biotinylated Human CD23, His,Avitag on under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95 % .