

Datasheet for ABIN3137664

CD86 Protein (CD86) (AA 26-247) (Fc Tag,AVI tag,Biotin)**3** Images[Go to Product page](#)

Overview

Quantity:	200 µg
Target:	CD86
Protein Characteristics:	AA 26-247
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This CD86 protein is labelled with Fc Tag,AVI tag,Biotin.

Product Details

Brand:	MABSol@,PrecisionAvi
Sequence:	AA 26-247
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 human IgG1 Fc tag at the C-terminus, followed by a Avi tag (Avitag™). The protein has a calculated MW of 53.8 kDa. As a result of glycosylation, the protein migrates as 66-100 kDa under reducing (R) condition, and 120-140 kDa under non-reducing (NR) condition (SDS-PAGE).
Purity:	>95 % as determined by SDS-PAGE.
Endotoxin Level:	Less than 1.0 EU per µg by the LAL method.

Target Details

Target:	CD86
Alternative Name:	CD86 (CD86 Products)
Background:	<p>Cluster of Differentiation 86 (CD86) is also known as B-lymphocyte activation antigen B7-2, is a type I membrane protein that is a member of the immunoglobulin superfamily, and is constitutively expressed on interdigitating dendritic cells, Langerhans cells, peripheral blood dendritic cells, memory B cells, and germinal center B cells. Additionally, B72 is expressed at low levels on monocytes and can be upregulated through interferon γ. CD86 is the ligand for two different proteins on the T cell surface: CD28 (for autoregulation and intercellular association) and CTLA-4 (for attenuation of regulation and cellular disassociation). CD86 works in tandem with CD80 to prime T cells. Recent study has revealed that B7-2 promotes the generation of a mature APC repertoire and promotes APC function and survival. Furthermore, the B7 proteins are also involved in innate immune responses by activating NF-κB-signaling pathway in macrophages. CD86 thus is regarded as a promising candidate for immune therapy. CD86+ macrophages in Hodgkin lymphoma patients are an independent marker for potential nonresponse to firstline-therapy.</p>
Molecular Weight:	53.8 kDa
Pathways:	TCR Signaling , Fc-epsilon Receptor Signaling Pathway , EGFR Signaling Pathway , Neurotrophin Signaling Pathway , Activation of Innate immune Response , Cellular Response to Molecule of Bacterial Origin , Positive Regulation of Immune Effector Process , Activated T Cell Proliferation

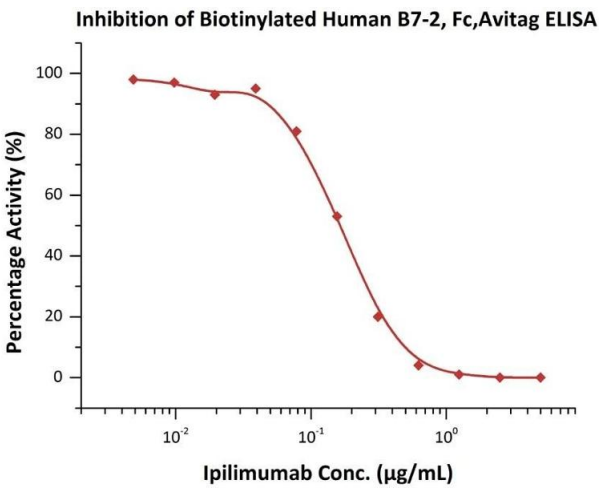
Application Details

Comment:	<p>Ready-to-use AvitagTM biotinylated protein:</p> <p>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.</p> <p>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.</p>
Restrictions:	For Research Use only

Handling

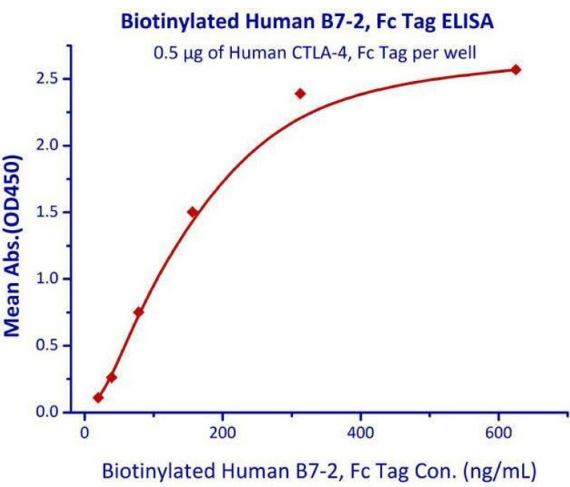
Format:	Lyophilized
Buffer:	Tris with Glycine, Arginine and NaCl, pH 7.5
Handling Advice:	Please avoid repeated freeze-thaw cycles.
Storage:	-20 °C

Images



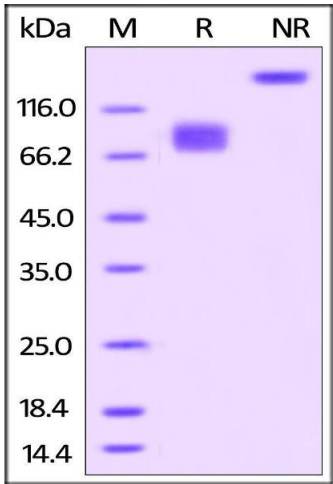
ELISA

Image 1. Serial dilutions of Ipilimumab were added into Human CTLA-4, Fc Tag (ABIN2180932,ABIN2180931): Biotinylated Human B7-2, Fc,Avitag (ABIN3137664,ABIN4369368) binding reactions. The half maximal inhibitory concentration (IC₅₀) is 0.1701 µg/mL (Routinely tested).



Binding Studies

Image 2. Immobilized Human CTLA-4, Fc Tag with a linear range of 19-156 ng/mL.



SDS-PAGE

Image 3. Biotinylated Human B7-2, Fc Tag on SDS-PAGE under reducing (R) and no-reducing (NR) conditions. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.