Datasheet for ABIN2870560

PDCD1LG2 Protein (AA 20-219) (His tag,AVI tag,Biotin)

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Overview

Quantity:	200 µg
Target:	PDCD1LG2
Protein Characteristics:	AA 20-219
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This PDCD1LG2 protein is labelled with His tag,AVI tag,Biotin.

Product Details

Brand:	MABSol®,PrecisionAvi
Sequence:	AA 20-219
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 an Avi tag (Avitag™) at the C-terminus, followed by a polyhistidine tag. The protein has a calculated MW of 25.2 kDa. The protein migrates as 35-45 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.
Purity:	>95 % as determined by SDS-PAGE.
Endotoxin Level:	Less than 1.0 EU per µg by the LAL method.

Target Details

Target:	PDCD1LG2
Alternative Name:	PD-L2 (PDCD1LG2 Products)
Background:	Programmed cell death 1 ligand 2 (PD-L2 or PDCD1 ligand 2) is also known as Butyrophilin B7-DC, CD antigen CD273, which belongs to the immunoglobulin superfamily or BTN/MOG family. The expression of PD-L2 is up-regulated by IFNG/IFN-gamma stimulation in monocytes and induced on dendritic cells grown from peripheral blood mononuclear cells with CSF2 and IL-4. PD-L2 Involved in the costimulatory signal, essential for T-cell proliferation and IFNG production in a PDCD1-independent manner. PD-L2 interaction with PDCD1 inhibits T-cell proliferation by blocking cell cycle progression and cytokine production.
Molecular Weight:	25.2 kDa

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

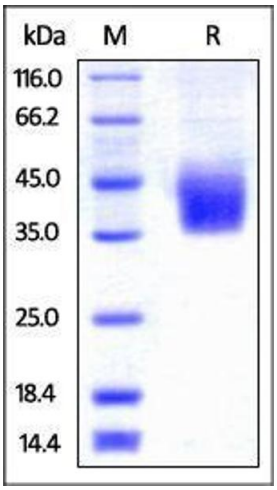
Publications

Product cited in:

Tocheva, Lerrer, Mor: "In Vitro Assays to Study PD-1 Biology in Human T Cells." in: **Current protocols in immunology**, Vol. 130, Issue 1, pp. e103, (2020) (PubMed).

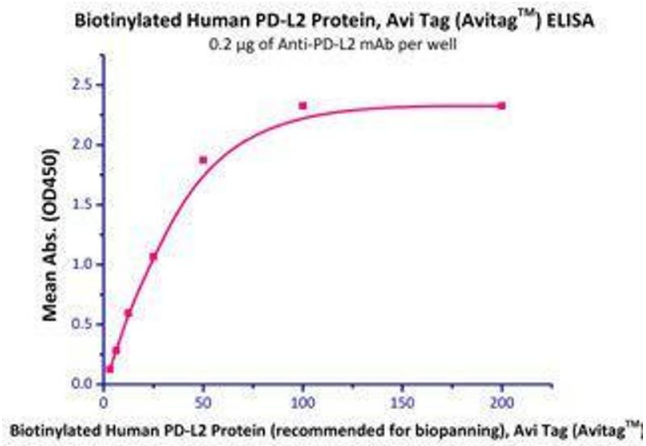
Arlauckas, Garris, Kohler, Kitaoka, Cuccarese, Yang, Miller, Carlson, Freeman, Anthony, Weissleder, Pittet: "In vivo imaging reveals a tumor-associated macrophage-mediated resistance pathway in anti-PD-1 therapy." in: **Science translational medicine**, Vol. 9, Issue 389, (2018) (PubMed).

Images



SDS-PAGE

Image 1. Biotinylated Human PD-L2 (recommended for biopanning) on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.



Binding Studies

Image 2. Immobilized anti-PD-L2 mAb (human IgG1) at 2 μg/mL (100 μl/well) can bind Biotinylated Human PD-L2, Avi Tag (Avitag™) (Cat# PD2-H82E8) with a linear range of 3-50 ng/mL.