

Product datasheet

Recombinant human PD-L1 protein (Active) ab167713

8 Images

Description

Product name	Recombinant human PD-L1 protein (Active)	
Biological activity	Immobilized ab167713 on Anti-His Tag (C-term) Antibody, precoated (0.1 µg/well) plate, binds Human PD-1, Mouse IgG2a Fc Tag (HPLC-verified), at 5 µg/mL (100 µL/well) with a linear range of 10-78 ng/mL.	
Purity	> 98 % SDS-PAGE. >90% as determined by SEC-HPLC.	
Endotoxin level	< 1.000 Eu/µg	
Expression system	HEK 293 cells	
Accession	Q9NZQ7	
Protein length	Protein fragment	
Animal free	No	
Nature	Recombinant	
Species	Human	
Sequence	FTVTVPKDLYVVEYGSNMTIECKFPVEKQLDLAALIVYWE MEDKNIIQFVHGEECLKVQHSSYRQRARLL KDQLSLGNAA LQITDVKLQDAGVYRCMISYGGADYKRITV KVNAPYNKINQRILVDPVTSEHELTCQAE GYPKAEVIWT SSDHQVLSGK TTTNSKREE KLFNVTSTLRINTTNEIFY CTFRRLDPEE NHTAELVIPE LPLAHPNER - 6*His(hhhhhh)	
Predicted molecular weight	26 kDa including tags	
Molecular weight information	The protein migrates as 30-35 kDa under reducing conditions due to glycosylation.	
Amino acids	19 to 238	
Tags	His tag C-Terminus	
Additional sequence information	(NP_054862.1)	

Specifications

Our [Abpromise guarantee](#) covers the use of **ab167713** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications HPLC

SDS-PAGE

Functional Studies

Form Lyophilized

Additional notes **For a recombinant rabbit monoclonal antibody to PD-L1 in IHC usage and KO validated - see [ab205921 \(clone 28-8\)](#)**

For a recombinant rabbit monoclonal antibody to PD-L1 in WB and ICC/IF usage - see [ab174838 \(clone EPR1161\(2\)\)](#)

Preparation and Storage

Stability and Storage

Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.

pH: 7.40

Constituents: PBS, 5% Trehalose

0.22 µm filtered

This product is an active protein and may elicit a biological response in vivo, handle with caution.

Reconstitution

Reconstitute with sterile deionized water to a concentration of 400 µg/ml.

General Info

Function

Involved in the costimulatory signal, essential for T-cell proliferation and production of IL10 and IFNG, in an IL2-dependent and a PDCD1-independent manner. Interaction with PDCD1 inhibits T-cell proliferation and cytokine production.

Tissue specificity

Highly expressed in the heart, skeletal muscle, placenta and lung. Weakly expressed in the thymus, spleen, kidney and liver. Expressed on activated T- and B-cells, dendritic cells, keratinocytes and monocytes.

Sequence similarities

Belongs to the immunoglobulin superfamily. BTN/MOG family.

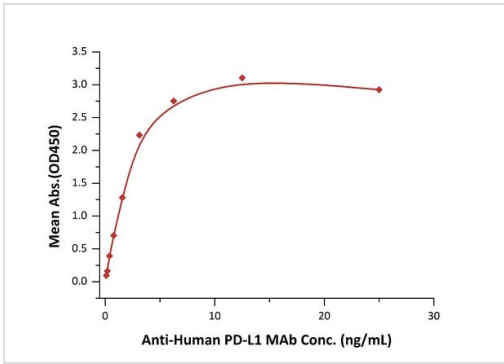
Contains 1 Ig-like C2-type (immunoglobulin-like) domain.

Contains 1 Ig-like V-type (immunoglobulin-like) domain.

Cellular localization

Cell membrane and Endomembrane system.

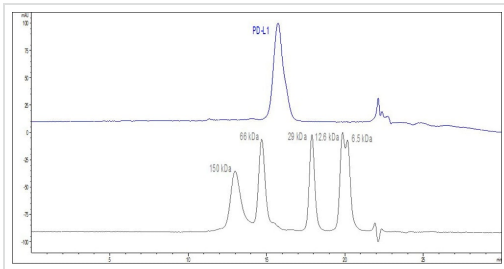
Images



Functional Studies - Recombinant human PD-L1 protein (ab167713)

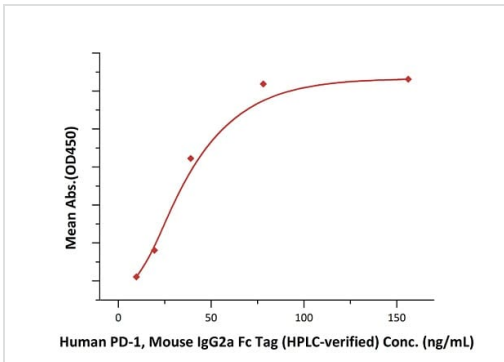
Immobilized ab167713 at 1 µg/mL (100 µL/well) binds Anti-Human PD-L1 MAb (Human IgG1).

Linear range of 0.1-3 ng/mL (QC tested).



Functional Studies - Recombinant human PD-L1 protein (Active) (ab167713)

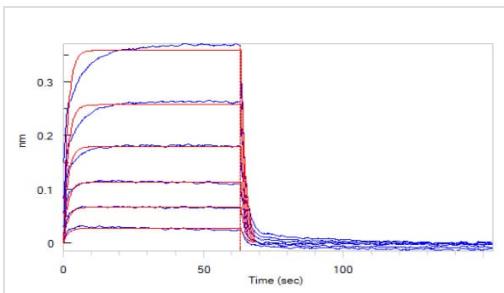
The purity of Human PD-L1 (His Tag) (HPLC verified) was greater than 90% as determined by SEC-HPLC.



Functional Studies - Recombinant human PD-L1 protein (ab167713)

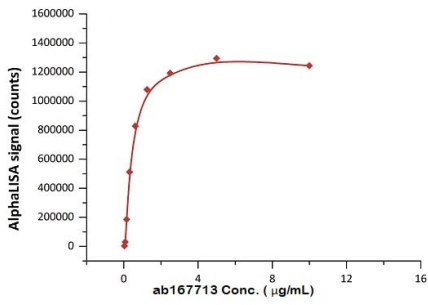
Immobilized ab167713 on Anti-His Tag (C-term) Antibody, precoated (0.1 µg/well) plate, binds Human PD-1, Mouse IgG2a Fc Tag (HPLC-verified), at 5 µg/mL (100 µL/well).

Linear range of 10-78 ng/mL (Routinely tested).



Functional Studies - Recombinant human PD-L1 protein (Active) (ab167713)

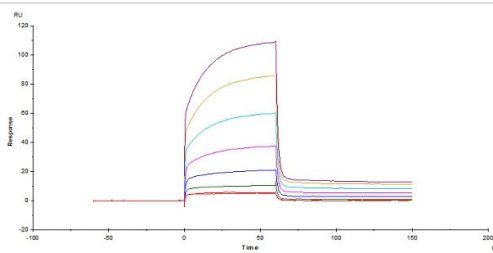
Loaded Recombinant human PD1 protein (Fc Chimera Active) [ab221398](#) on ProteinA Biosensor, can bind Human PD-L1, His Tag ab167713 with an affinity constant of 5.3 µM as determined in BLI assay.



Functional Studies - Recombinant human PD-L1 protein (ab167713)

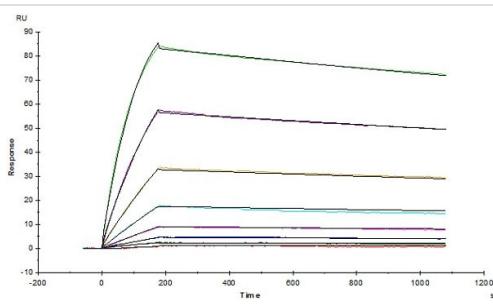
Biotinylated Human PD-1, Fc Tag ([ab246137](#)) binds Recombinant human PD-L1 protein ab167713 at 1 µg/mL (5µL/well).

Linear range of 0.02-0.625 µg/mL as determined in a alphaLISA homogeneous assay (Routinely tested).



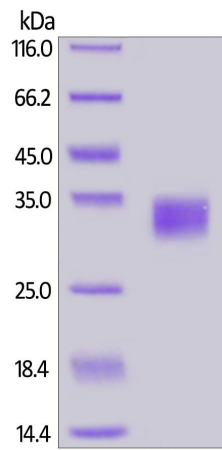
Functional Studies - Recombinant human PD-L1 protein (ab167713)

Human PD-1, Fc Tag ([ab221398](#)), captured on CM5 chip via anti-human IgG Fc antibody, binds ab167713 with an affinity constant of 3.6 µM, as determined in an SPR assay (Biacore T200).



Functional Studies - Recombinant human PD-L1 protein (ab167713)

Anti-Human PD-L1 Mab (Human IgG1), captured on CM5 chip via anti-human IgG Fc antibodies surface, binds ab167713 with an affinity constant of 0.286 nM, as determined in a SPR assay (Biacore T200) (Routinely tested).



SDS-PAGE - Recombinant human PD-L1 protein
(Active) (ab167713)

Reduced ab167713 on SDS-PAGE, stained overnight with Coomassie Blue.

The purity of the protein is greater than 98%.

The protein migrates as 30-35 kDa under reducing conditions, due to glycosylation.

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