# abcam

## Product datasheet

## Recombinant human PD-L1 protein (Active) ab167713

2 References 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  $\mu$ g/mL (100  $\mu$ L/well) with a linear range

of 10-78 ng/mL.

Purity > 98 % SDS-PAGE.

>90% as determined by SEC-HPLC. Purified by Immobilized metal affinity chromatography.

Expression system < 1.000 Eu/µg

HEK 293 cells

Accession Q9NZQ7

Protein length Protein fragment

Animal free No

**Nature** Recombinant

**Species** Human

**Sequence** FTVTVPKDLYVVEYGSNMTIECKFPVEKQLDLAALIVYWE

**MEDKNIIQFV** 

HGEEDLKVQHSSYRQRARLLKDQLSLGNAALQITDVKLQD

**AGVYRCMISY** 

GGADYKRITVKVNAPYNKINQRILVVDPVTSEHELTCQAEG

YPKAEVIWT

SSDHQVLSGKTTTTNSKREEKLFNVTSTLRINTTTNEIFYCT

FRRLDPEE NHTAELVIPELPLAHPPNER

**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.

1

**Applications** HPLC

SDS-PAGE

**Functional Studies** 

Form Lyophilized

Additional notes For a recombinant rabbit monoclonal antiody to PD-L1 in IHC usage and KO validated -

see ab205921 (clone 28-8)

For a recombinant rabbit monoclonal antiody 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,

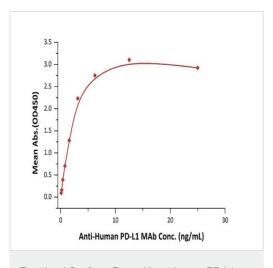
keratinocytes and monocytes.

**Sequence similarities**Belongs to the immunoglobulin superfamily. BTN/MOG family.

Contains 1 lg-like C2-type (immunoglobulin-like) domain. Contains 1 lg-like V-type (immunoglobulin-like) domain.

**Cellular localization** Cell membrane and Endomembrane system.

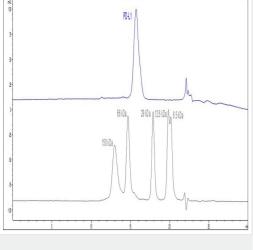
#### **Images**



Immobilized ab167713 at 1  $\mu$ g/mL (100  $\mu$ L/well) binds Anti-Human PD-L1 MAb (Human  $\lg$ G1).

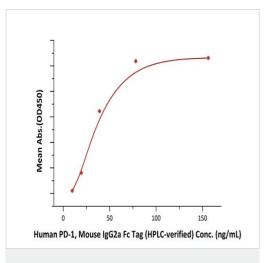
Linear range of 0.1-3 ng/mL (QC tested).



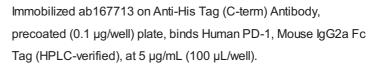


Functional Studies - Recombinant human PD-L1 protein (Active) (ab167713)

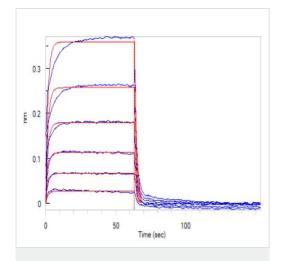
The purity of Human PD-L1 (His Tag) (HPLC verified) was greater than 90% as determined by SEC-HPLC.



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

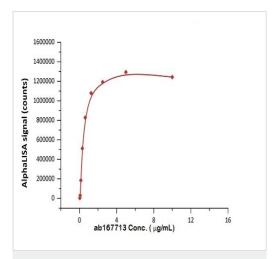


Linear range of 10-78 ng/mL (Routinely tested).



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

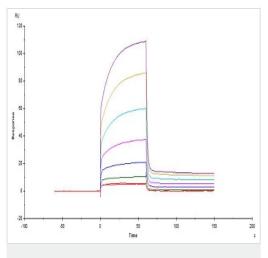
Loaded Recombinant human PD1 protein (Fc Chimera Active) <u>ab221398</u> on ProteinA Biosensor, can bind Human PD-L1, His Tag ab167713 with an affinity constant of  $5.3~\mu\text{M}$  as determined in BLI assay.



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

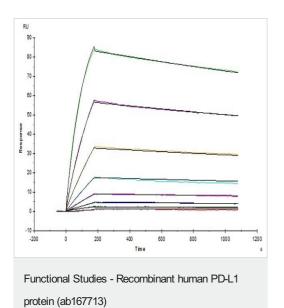
Biotinylated Human PD-1, Fc Tag ( $\underline{ab246137}$ ) binds Recombinant human PD-L1 protein ab167713 at 1  $\mu$ g/mL ( $5\mu$ L/well).

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

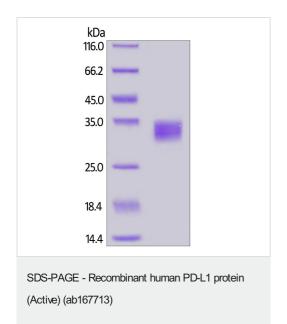


Functional Studies - Recombinant human PD-L1 protein (ab167713)

Human PD-1, Fc Tag ( $\underline{ab221398}$ ), captured on CM5 chip via antihuman lgG Fc antibody, binds ab167713 with an affinity constant of 3.6  $\mu$ M, as determined in an SPR assay (Biacore T200).



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).



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.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

## Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours

- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <a href="https://www.abcam.com/abpromise">https://www.abcam.com/abpromise</a> or contact our technical team.

#### Terms and conditions

• Guarantee only valid for products bought direct from Abcam or one of our authorized distributors