

Rabbit PDL-1 Polyclonal Antibody | anti-CD274 antibody

PDL-1 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA10941	Rabbit	Human, Mouse, Rat	ELISA, Western Blot, Immunohistochemistry, Immunofluorescence, Flow Cytometry, Functional Assay

PRODUCT SYNONYMS

PDL-1; Polyclonal Antibody; PDL-1 Antibody; PD-L1 Antibody: B7-H; B7H1; PDL1; PD-L1; PDCD1L1; PDCD1LG1; Programmed cell death 1 ligand 1; B7homolog 1; anti-CD274 antibody

PRODUCT SPECIFICATIONS

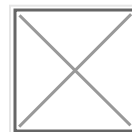
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	PD-L1 antibody has no cross-reactivity to PD-L2.
Purity/Purification	PD-L1 Antibody is affinity chromatography purified via peptide column.
Form/Format	Liquid
Concentration	1 mg/mL (varies by lot)
Applicable Applications for anti-CD274 antibody	ELISA, WB (Western Blot), IHC (Immunohistochemistry-Paraffin), IF (Immunofluorescence), FCM/FACS (Flow Cytometry)
Application Notes	Optimal dilutions for each application to be determined by the researcher.
Immunogen	Anti-PD-L1 antibody (4059) was raised against a peptide corresponding to 17 amino acids near the center of human PD-L1 isoform 1. The immunogen is located within amino acids 60 - 110 of PD-L1.
Homology	Predicted species reactivity based on immunogen sequence: Rat: (77%), Mouse: (71%)
Preparation and Storage	PD-L1 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

IMAGES



IF (Immunofluorescence)

Figure 12 Immunohistochemistry Validation of PD-L1 in Human Tumors (Gadiot et al., 2011) Immunohistochemical analysis of patient tumors labeling PD-L1 with anti-PD-L1 antibodies (AAA10941). Several anti-PD-L1 antibodies were tested for staining, "Only 1 antibody gave no background staining and was competitively blocked by the addition of PD-L1Fc protein (AAA10941)".



IF (Immunofluorescence)

Figure 11 Immunofluorescence Validation of PD-L1 in Human Cells (Dhar et al., 2018) (A) Several antibody brands were first tested with RBCs, WBCs, and HeLa cells. (AAA10941) was chosen as it provided the highest staining intensity. (B, C) Using the optimal conditions of anti-PDL1 at a concentration of 50ug/mL, following by goat anti-rabbit Alexa Fluor 647, PDL-1 staining was tested on several lung cancer cell lines: (adenocarcinoma), adenocarcinoma), (squamous) and WBCs as a control. (D) Once validated, patient samples were stained for PD-L1, CK, CD45, DAPI.



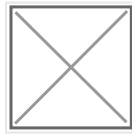
IF (Immunofluorescence)

Figure 10 Immunofluorescence Validation of PD-L1 in Rat Heart. Immunofluorescence analysis of 4% paraformaldehyde-fixed rat heart tissue labeling PD-L1 with AAA10941 at 20 ug/ml, followed by goat anti-rabbit IgG secondary antibody at 1/250 dilution (red).



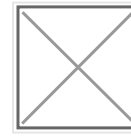
IHC (Immunohistochemistry)

Figure 9 Immunohistochemistry Validation of PD-L1 in Human Heart. Immunohistochemical analysis of paraffin-embedded human heart tissue using anti-PD-L1 antibody (AAA10941) at 2.5 ug/ml. Tissue was fixed with formaldehyde and blocked with 10% serum for 1 h at RT; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody overnight at 4°C. A goat anti-rabbit IgG H&L (HRP) at 1/250 was used as secondary. Counter stained with Hematoxylin.



IHC (Immunohistochemistry)

Figure 8 Immunohistochemistry Validation of PD-L1 in Rat Heart. Immunohistochemical analysis of paraffin-embedded rat heart tissue using anti-PD-L1 antibody (AAA10941) at 5 ug/ml. Tissue was fixed with formaldehyde and blocked with 10% serum for 1 h at RT; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody overnight at 4°C. A goat anti-rabbit IgG H&L (HRP) at 1/250 was used as secondary. Counter stained with Hematoxylin.



FCM (Flow Cytometry)

Figure 7 Flow Cytometry Validation of PD-L1. Overlay histogram showing A-20 cells stained with AAA10941 (red line, 1ug/1x10⁶ cells). 1 h incubation at 4°C in 2% FBS/PBS. Followed by secondary antibody 488 goat anti-rabbit IgG (H+L) at 1/500 dilution for 1 h 4°C. Isotype control antibody (Green line) was mouse IgG1 (1ug/1x10⁶ cells) used under the same conditions. Acquisition of >10,000 events was performed.

ADDITIONAL INFORMATION

Related Product Information for anti-CD274 antibody

PD-L1 Antibody: Cell-mediated immune responses are initiated by T lymphocytes that are themselves stimulated by cognate peptides bound to MHC molecules on antigen-presenting cells (APC). T-cell activation is generally self-limited as activated T cells express receptors such as PD-1 (also known as PDCD-1) that mediate inhibitory signals from the APC. PD-1 can bind two different but related ligands, PD-L1 and PD-L2. PD-L1 is a B7-related protein that inhibits cell-mediated immune responses by reducing the secretion of IL-2 and IL-10 from memory T cells. This suggests that PD-L1 may be useful in reducing allogenic CD4+ memory T-cell responses to endothelial cells, thereby reducing the likelihood of host immune responses.

NCBI AND UNIPROT INFORMATION

NCBI GI #	7661534
NCBI GeneID	29126
NCBI Accession #	NP_054862
NCBI GenBank Nucleotide #	NM_014143.3
UniProt Accession #	Q9NZQ7 ; Q14CJ2 ; Q2V8D5 ; Q66RK1 ; Q6WEX4 ; Q9NUZ5 ; B2RBA2 ; B4DU27
Molecular Weight	Predicted: 33kDa Observed: 37kDa
NCBI Official Full Name	programmed cell death 1 ligand 1 isoform a
NCBI Official Synonym Full Names	CD274 molecule
NCBI Official Symbol	CD274
NCBI Official Synonym Symbols	B7-H; B7H1; PDL1; PD-L1; PDCD1L1; PDCD1LG1
NCBI Protein Information	programmed cell death 1 ligand 1; B7 homolog 1; CD274 antigen; PDCD1 ligand 1; programmed death ligand 1
UniProt Protein Name	Programmed cell death 1 ligand 1
UniProt Gene Name	CD274
UniProt Synonym Gene Names	B7H1; PDCD1L1; PDCD1LG1; PDL1; PD-L1; PDCD1 ligand 1; Programmed death ligand 1; B7-H1
UniProt Entry Name	PD1L1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/pdl-1-antibody-western-blot-immunohistochemistry-paraffin-immunofluorescence-flow-cytometry-elisa/10941>