

## Product Datasheet

### CD274 Antibody (orb1239835)

<b>Catalog Number</b>	orb1239835
<b>Category</b>	Antibodies
<b>Description</b>	CD274 Antibody
<b>Target</b>	CD274
<b>Clonality</b>	Polyclonal
<b>Species/Host</b>	Rabbit
<b>Isotype</b>	IgG
<b>Conjugation</b>	Unconjugated
<b>Reactivity</b>	Human, Mouse, Rat
<b>Form/Appearance</b>	Liquid
<b>Concentration</b>	1 mg/mL
<b>Buffer/Preservatives</b>	PD-L1 Antibody is supplied in PBS containing 0.02% sodium azide.
<b>Purification</b>	PD-L1 Antibody is affinity chromatography purified via peptide column.
<b>Immunogen</b>	Anti-PD-L1 antibody (orb1239835) 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.
<b>UniProt ID</b>	<b>Q9NZQ7</b>
<b>MW</b>	Predicted: 33 kDa Observed: 37 kDa
<b>Tested applications</b>	ELISA, FC, IF, IHC-P, WB

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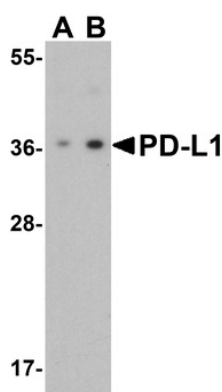
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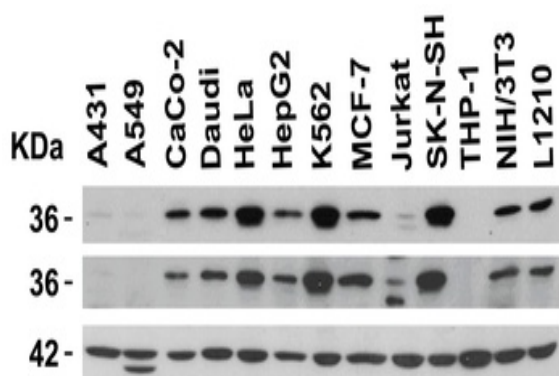
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<b>Specificity</b>	PD-L1 antibody has no cross-reactivity to PD-L2.
<b>Antibody Type</b>	Primary Antibody
<b>Modifications</b>	None
<b>Storage</b>	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
<b>Note</b>	For research use only
<b>NCBI</b>	<a href="#">NP_054862</a>
<b>Expiration Date</b>	12 months from date of receipt.



Western Blot Validation of PD-L1 in HeLa Cells. Loading: 15 µg of lysates per lane. Antibodies: orb1239835 (A: 1 µg/mL, B: 2 µg/mL), 1 h incubation at RT in 5% NFDm/TBST. Secondary: Goat anti-rabbit IgG HRP conjugate at 1:10000 dilution.



Independent Antibody Validation (IAV) via Protein Expression Profile in Human and Mouse cell lines. Loading: 15 µg of lysates per lane. Antibodies: orb1239835 (2 µg/mL), orb1239770 (2 µg/mL), and beta-actin (1 µg/mL), 1 h incubation at RT in 5% NFDm/TBST. Secondary: Goat anti-rabbit and or anti-mouse IgG HRP conjugate at 1:10000 and 1:5000 dilution, respectively.

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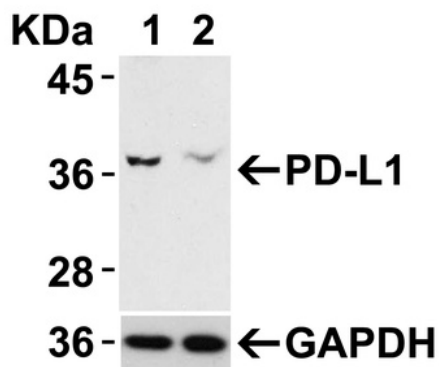
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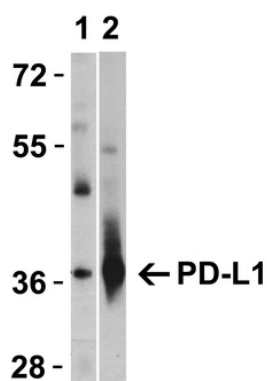
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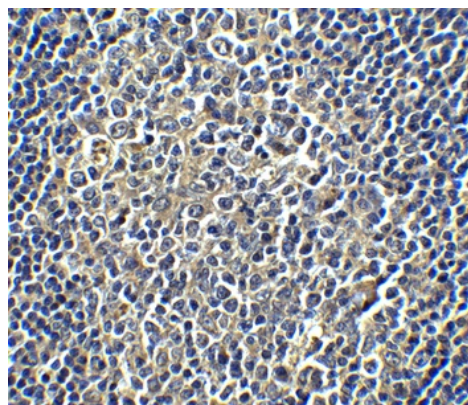
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Validation with PD-L1 siRNA Knockdown in HeLa Cells. HeLa cells were transfected with control siRNAs (lane 1) or PD-L1 siRNAs (lane 2) Loading: 10 µg of HeLa whole cell lysates per lane. Antibodies: orb1239835 (2 µg/mL) and GAPDH (orb1239765, 0.02 µg/mL), 1 h incubation at RT in 5% NFDM/TBST. Secondary: Goat anti-mouse IgG HRP conjugate at 1:5000 dilution.



Validation with PD-L1 overexpression in 293 cells. Loading: Lysates/proteins at 15 µg per lane. Lane 1: non-transfected 293 cells, Lane 2: PD-L1 overexpressed 293 cells. Antibodies: orb1239835 (1 µg/mL). 1 h incubation at RT in 5% NFDM/TBST. Secondary: Goat anti-rabbit IgG HRP conjugate at 1:10000 dilution.



Immunohistochemistry Validation of PD-L1 in Human Tonsil Cells. Immunohistochemical analysis of paraffin-embedded human tonsil tissue using anti-PD-L1 antibody (orb1239835) at 5 µg/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.

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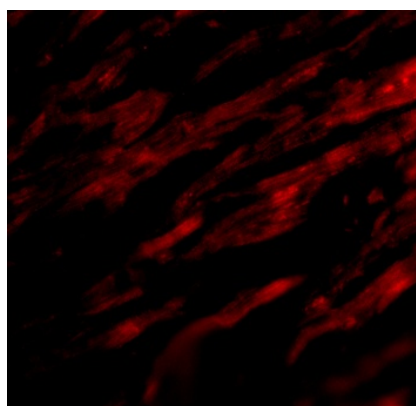
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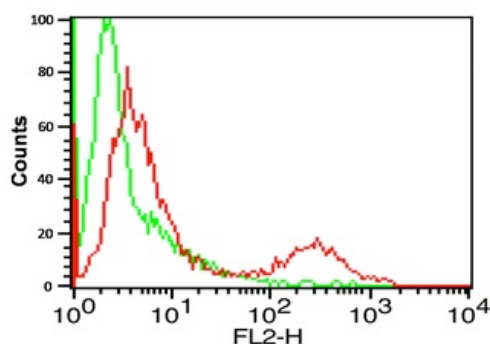
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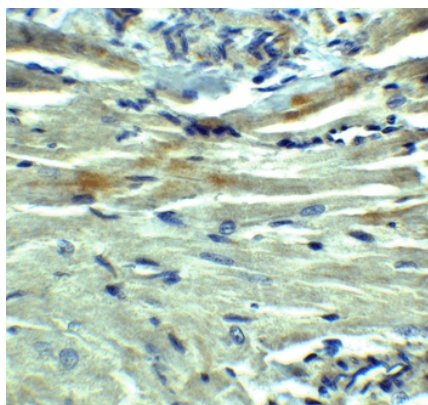
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Immunofluorescence Validation of PD-L1 in Human Heart. Immunofluorescent analysis of 4% paraformaldehyde-fixed human heart tissue labeling PD-L1 with orb1239835 at 20  $\mu\text{g}/\text{mL}$ , followed by goat anti-rabbit IgG secondary antibody at 1/500 dilution (red). Image showing both membrane and cytoplasmic staining on human heart tissue.



Flow Cytometry Validation of PD-L1. Overlay histogram showing A-20 cells stained with orb1239835 (red line,  $1\mu\text{g}/1 \times 10^6$  cells). 1 h incubation at  $4^\circ\text{C}$  in 2% FBS/PBS. Followed by secondary antibody 488 goat anti-rabbit IgG (H+L) at 1/500 dilution for 1 h  $4^\circ\text{C}$ . Isotype control antibody (Green line) was mouse IgG1 ( $1\mu\text{g}/1 \times 10^6$  cells) used under the same conditions. Acquisition of  $> 10000$  events was performed.



Immunohistochemistry Validation of PD-L1 in Rat Heart. Immunohistochemical analysis of paraffin-embedded rat heart tissue using anti-PD-L1 antibody (orb1239835) at  $5\mu\text{g}/\text{ml}$ . 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  $4^\circ\text{C}$ . A goat anti-rabbit IgG H&L (HRP) at 1/250 was used as secondary. Counter stained with Hematoxylin.

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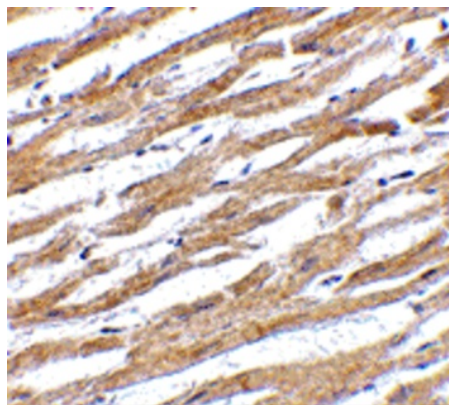
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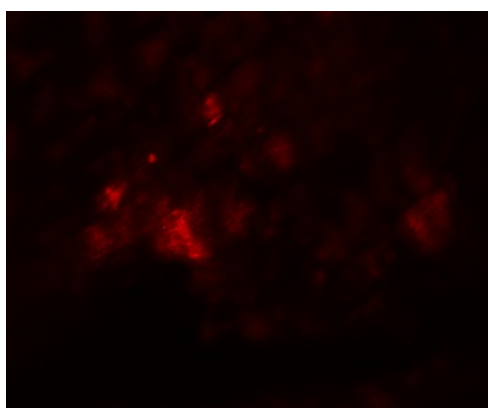
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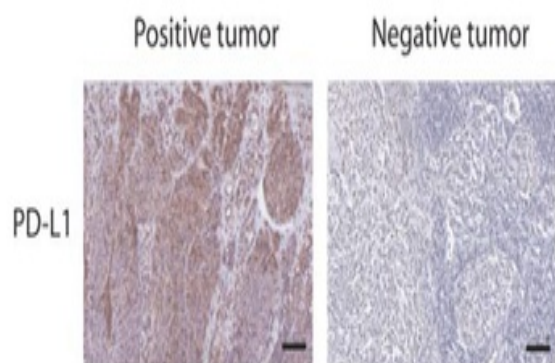
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Immunohistochemistry Validation of PD-L1 in Human Heart. Immunohistochemical analysis of paraffin-embedded human heart tissue using anti-PD-L1 antibody (orb1239835). Tissue was fixed with formaldehyde and blocked with 10% serum for 1 h at RT; antigen 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.



Immunofluorescence Validation of PD-L1 in Rat Heart. Immunofluorescence analysis of 4% paraformaldehyde-fixed rat heart tissue labeling PD-L1 with orb1239835 at 20 µg/ml, followed by goat anti-rabbit IgG secondary antibody at 1/250 dilution (red).



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 (orb1239835). Several anti-PD-L1 antibodies were tested for staining.

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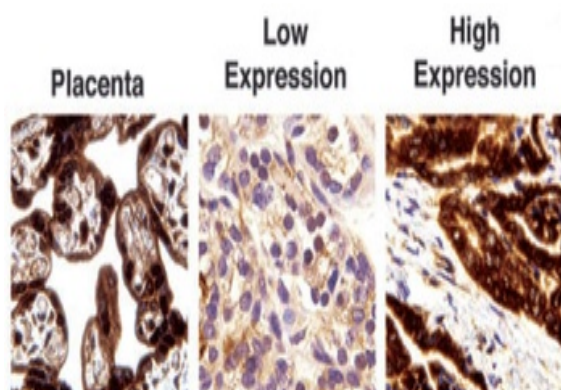
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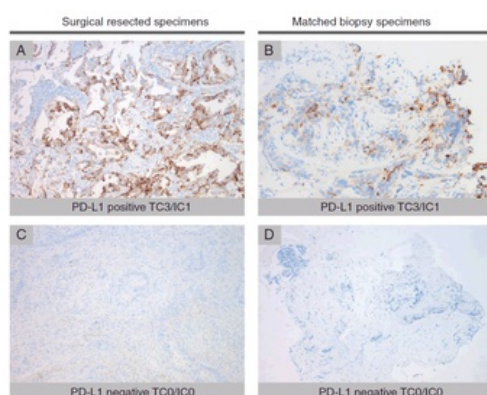
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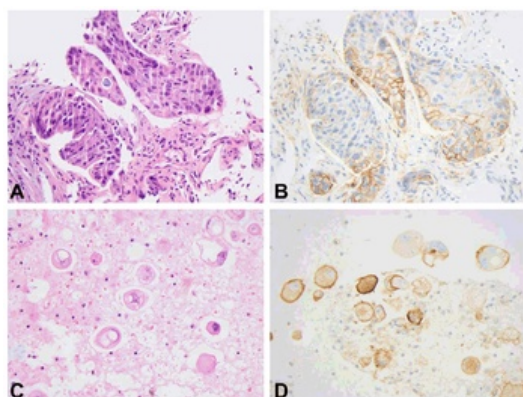
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Immunohistochemistry Validation of PD-L1 in Human thyroid cancer (Angell et al., 2014). Immunohistochemical analysis of PD-L1 expression in human thyroid cancer with anti-PD-L1 antibodies (orb1239835). Placenta was used a positive control.



Immunohistochemistry Validation of PD-L1 in Human Lung Cancer (Ilie et al., 2015). Surgical specimens (left panel) and matched biopsy specimens (right panel). PD-L1-positive (A, B) and PD-L1-negative (C, D) tumors.



Immunohistochemistry Validation of PD-L1 in Human Lung adenocarcinoma (Heymann et al., 2017). HE staining (left panel) and PD-L1 expression (right panel) in the tumor and pleural fluid for a patient with lung adenocarcinoma. PD-L1 expression detected by anti-PD-L1 antibodies (orb1239835) demonstrated membranous staining in approximately 80% of tumor cells (C) and in approximately 75% of tumor cells (D), respectively.

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