

## Product Datasheet

### PD-L1 Antibody / B7-H1 / CD274 (orb2641418)

<b>Catalog Number</b>	orb2641418
<b>Category</b>	Antibodies
<b>Description</b>	<p>Engagement of CD28 by B7-1 (CD80) or B7-2 (CD86) in the presence of antigen promotes T-cell proliferation, cytokine production, differentiation of effector T-cells and the induction of BCLX, a promoter of T-cell survival. recruitment of CTLA4 by B7-1 or B7-2, on the other hand, may inhibit proliferation and interleukin-2 (IL-2) production. PD-L1 is 290-amino acid type I transmembrane protein, which is 20% and 15% identical to B7-1 and B7-2, respectively, has immunoglobulin V-like and C-like domains and a 30-amino acid cytoplasmic tail. PD-L1 does not bind CD28, cytotoxic T-lymphocyte A4 or ICOS (inducible co-stimulator). IL-2, although produced in small amounts, is required for the effect of PD-L1 co-stimulation. PD-L2 protein contains a signal sequence, IgV- and IgC-like domains, a transmembrane region and a cytoplasmic region. Constitutive expression of PD-L1 and PD-L2 on parenchymal cells of heart, lung and kidney suggests that the PD-1-PD-L system could provide unique negative signaling to help prevent autoimmune diseases.</p>
<b>Clonality</b>	Monoclonal
<b>Species/Host</b>	Mouse
<b>Isotype</b>	Mouse IgG2b, kappa
<b>Conjugation</b>	Unconjugated
<b>Reactivity</b>	Human, Mouse
<b>Buffer/Preservatives</b>	1 mg/ml in 1X PBS; rAlbumin free, sodium azide free
<b>Purification</b>	Protein G affinity chromatography
<b>Immunogen</b>	A portion of amino acids 39-191 from the human protein was used as the immunogen for this PD-L1 antibody.

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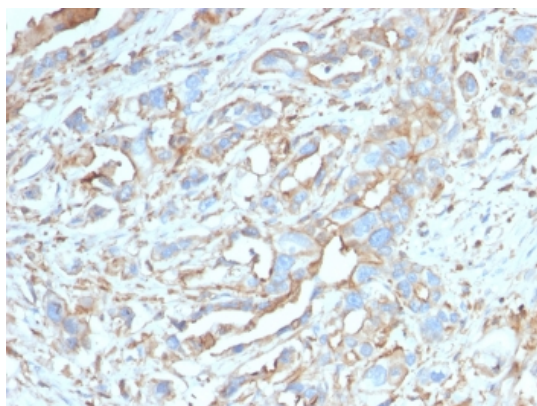
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<b>UniProt ID</b>	<b>Q9NZQ7</b>
<b>Tested applications</b>	ELISA, FACS, IF, IHC-P, WB
<b>Dilution range</b>	ELISA: order BSA/sodium azide-free format for coating,Western blot: 1-2ug/ml,Flow cytometry: 1-2ug/million cells,Immunofluorescence: 1-2ug/ml,Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT
<b>Application notes</b>	Optimal dilution of the PD-L1 antibody should be determined by the researcher.
<b>Antibody Type</b>	Primary Antibody
<b>Clone Number</b>	PDL1/2746
<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>Expiration Date</b>	12 months from date of receipt.



IHC testing of FFPE breast carcinoma with PD-L1 antibody (clone PDL1/2746). HIER: boil tissue sections in pH9 10mM Tris with 1mM EDTA for 10-20 min followed by cooling at RT for 20 min.

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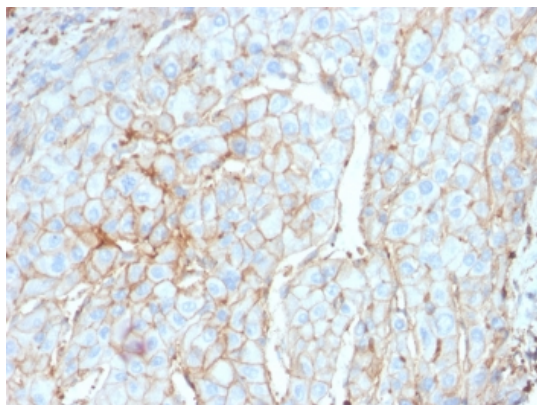
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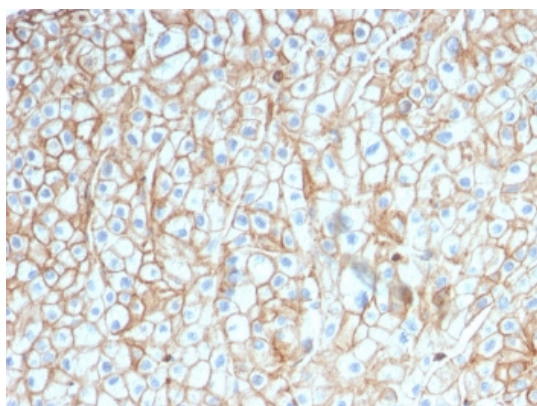
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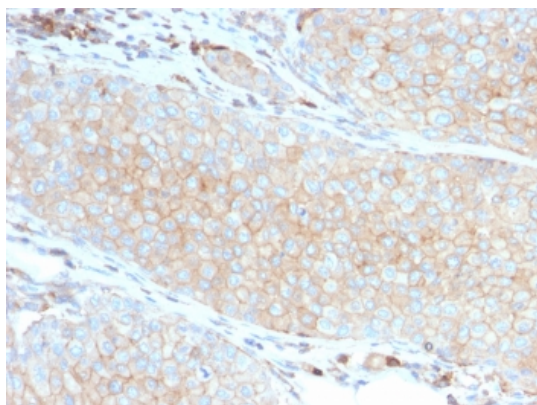
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IHC testing of FFPE cervical carcinoma with PD-L1 antibody (clone PDL1/2746). HIER: boil tissue sections in pH9 10mM Tris with 1mM EDTA for 10-20 min followed by cooling at RT for 20 min.



IHC testing of FFPE lung SCC with PD-L1 antibody (clone PDL1/2746). HIER: boil tissue sections in pH9 10mM Tris with 1mM EDTA for 10-20 min followed by cooling at RT for 20 min.



IHC testing of FFPE basal cell carcinoma with PD-L1 antibody (clone PDL1/2746). HIER: boil tissue sections in pH9 10mM Tris with 1mM EDTA for 10-20 min followed by cooling at RT for 20 min.

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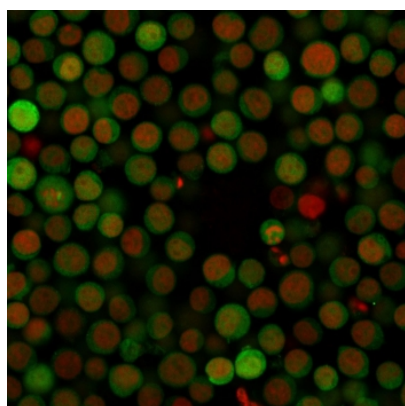
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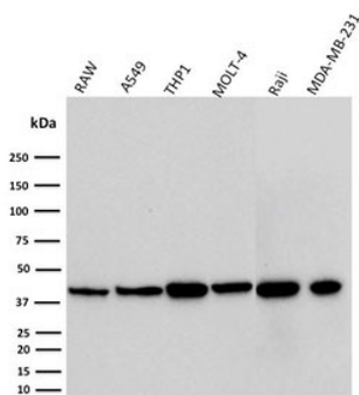
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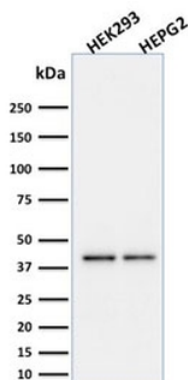
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Immunofluorescent staining of human Jurkat cells with PD-L1 antibody (clone PDL1/2746) and a CF488 labeled secondary (green). Nuclei were counterstained with Reddot (red).



Western blot testing of mouse and human cell lysates with PD-L1 antibody (PDL1/2746). Expected molecular weight ~34 kDa (unmodified), 45-70 kDa (glycosylated).



Western blot testing of human cell lysates with PD-L1 antibody (PDL1/2746). Expected molecular weight ~34 kDa (unmodified), 45-70 kDa (glycosylated).

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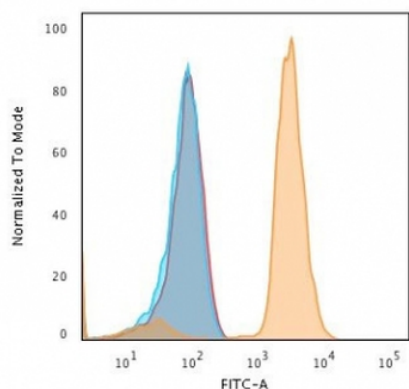
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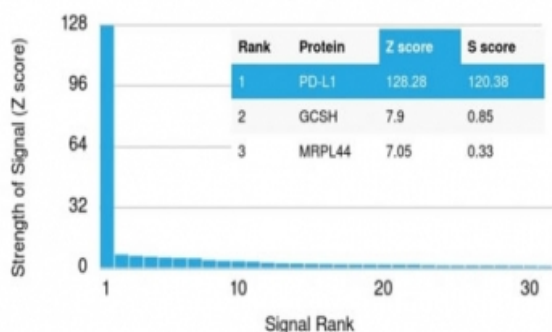
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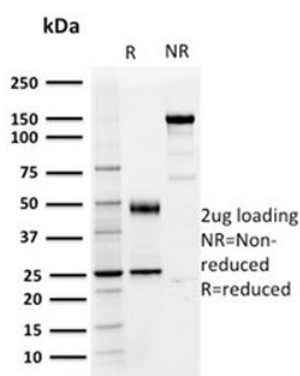


FACS testing of fixed and permeabilized human Jurkat cells with PD-L1 antibody; Blue = cells alone, Red = isotype control, Orange = PD-L1 antibody.

### Human Protein Microarray Specificity Validation



Analysis of HuProt (TM) microarray containing more than 19,000 full-length human proteins using PD-L1 antibody (clone PDL1/2746). These results demonstrate the foremost specificity of the PDL1/2746 mAb. Z- and S- score: The Z-score represents the strength of a signal that an antibody (in combination with a fluorescently-tagged anti-IgG secondary Ab) produces when binding to a particular protein on the HuProt (TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If the targets on the HuProt (TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-scores. The S-score therefore represents the relative target specificity of an Ab to its intended target.



SDS-PAGE analysis of purified, BSA-free PD-L1 antibody (clone PDL1/2746) as confirmation of integrity and purity.

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