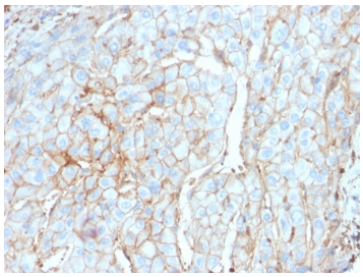
PD-L1 Antibody / Tumor Microenvironment Immune Checkpoint Antibody [clone PDL1/2746] (V3955)

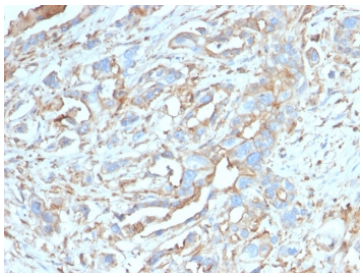
Catalog No.	Formulation	Size
V3955-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3955-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3955SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

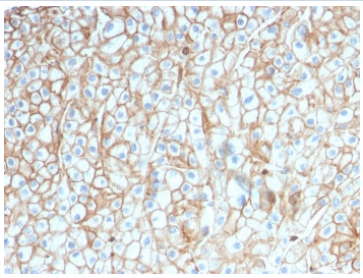
Species Reactivity	Human, Mouse
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b, kappa
Clone Name	PDL1/2746
Purity	Protein G affinity chromatography
UniProt	Q9NZQ7
Localization	Cell surface, cytoplasm
Applications	ELISA: order BSA/sodium azide-free format for coating 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
Limitations	This PD-L1 Antibody / Tumor Microenvironment Immune Checkpoint Antibody is available for research use only.



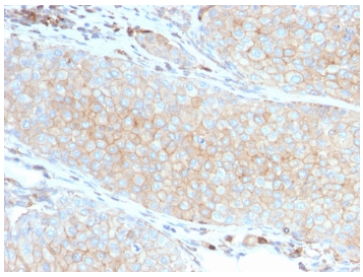
PD-L1 Antibody Cervical Carcinoma IHC. Immunohistochemistry analysis of PD-L1 (CD274) expression in FFPE human cervical carcinoma using clone PDL1/2746. The rabbit monoclonal antibody demonstrates prominent membranous HRP-DAB brown staining in tumor epithelial cells, with additional staining observed in scattered tumor-associated immune cells, highlighting immune checkpoint activity within the tumor microenvironment. The staining pattern reflects heterogeneous PD-L1 expression across tumor regions and supports evaluation of tumor-immune interactions and checkpoint signaling. Heat-induced epitope retrieval was performed using pH 9 Tris-EDTA buffer.



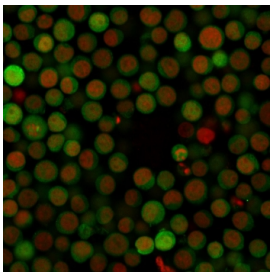
PD-L1 Antibody Breast Carcinoma IHC. Immunohistochemistry analysis of PD-L1 (CD274) expression in FFPE human breast carcinoma using clone PDL1/2746. The antibody demonstrates membranous HRP-DAB brown staining in tumor epithelial cells with additional signal in tumor-associated immune cells, highlighting immune checkpoint activity within the tumor microenvironment. The staining pattern shows heterogeneous expression across tumor regions, supporting evaluation of tumor-immune interactions and PD-L1-associated signaling. Heat-induced epitope retrieval was performed using pH 9 Tris-EDTA buffer.



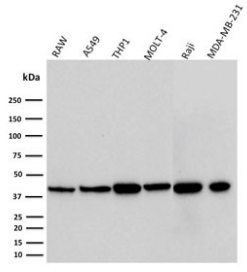
PD-L1 Antibody Lung Squamous Cell Carcinoma IHC. Immunohistochemistry analysis of PD-L1 (CD274) expression in FFPE human lung squamous cell carcinoma using clone PDL1/2746. The antibody demonstrates strong membranous HRP-DAB brown staining in tumor epithelial cells, with additional signal in tumor-associated immune cells, reflecting active immune checkpoint signaling within the tumor microenvironment. The staining pattern shows regionally heterogeneous expression across tumor nests, supporting evaluation of PD-L1 distribution and tumor-immune interactions. Heat-induced epitope retrieval was performed using pH 9 Tris-EDTA buffer.



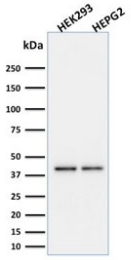
PD-L1 Antibody Basal Cell Carcinoma IHC. Immunohistochemistry analysis of PD-L1 (CD274) expression in FFPE human basal cell carcinoma using clone PDL1/2746. The antibody demonstrates membranous HRP-DAB brown staining in tumor epithelial cells, with focal staining in tumor-associated immune cells within the surrounding stroma, consistent with localized immune checkpoint activity. The staining pattern highlights heterogeneous PD-L1 expression across tumor regions, supporting evaluation of tumor-immune interactions and checkpoint signaling dynamics. Heat-induced epitope retrieval was performed using pH 9 Tris-EDTA buffer.



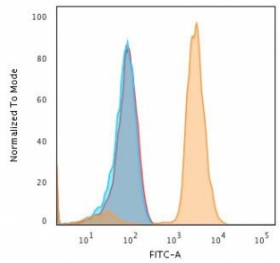
PD-L1 Antibody Jurkat Cells IF. Immunofluorescence analysis of PD-L1 (CD274) expression in human Jurkat cells using clone PDL1/2746. The antibody (green) demonstrates cell-associated staining consistent with PD-L1 localization, while nuclei are counterstained with Reddot (red). The staining pattern supports detection of CD274 in immune cell populations and enables visualization of expression at the single-cell level.



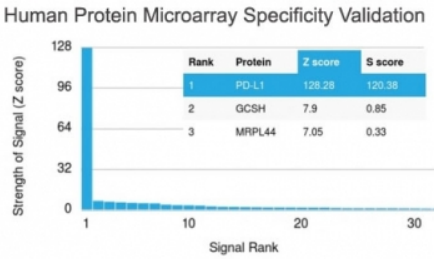
PD-L1 Antibody Western Blot. Western blot analysis of PD-L1 (CD274) expression in human and mouse cell lysates including RAW, A549, THP-1, MOLT-4, Raji, and MDA-MB-231 using clone PDL1/2746. A band is detected at approximately 45â€“55 kDa, consistent with glycosylated PD-L1, with possible lower signal near the predicted molecular weight of ~34 kDa representing the unglycosylated form. PD-L1 is a known glycoprotein, and the observed band pattern reflects variable glycosylation states across different cell types, supporting expected expression and post-translational modification of CD274.



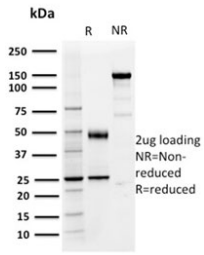
Western blot testing of human cell lysates with PD-L1 antibody (PDL1/2746). Expected molecular weight ~34 kDa (unmodified), 45-70 kDa (glycosylated).



PD-L1 Antibody Jurkat Cells FACS. Flow cytometry analysis of PD-L1 (CD274) expression in fixed and permeabilized human Jurkat cells using clone PDL1/2746. The PD-L1 antibody (orange) demonstrates a clear right-shifted population compared to cells alone (blue) and isotype control (red), indicating specific detection of CD274. The distinct separation between negative and positive populations supports accurate gating and reliable identification of PD-L1-expressing cells in flow cytometry assays.



PD-L1 Antibody 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.

Description

Programmed death-ligand 1 (CD274), commonly known as PD-L1, is a central immune checkpoint ligand that regulates T cell activation through interaction with PD-1 and plays a critical role in tumor immune evasion. PD-L1 Antibody / Tumor Microenvironment Immune Checkpoint Antibody is designed to interrogate the spatial and functional relationships between tumor cells and immune populations within the tumor microenvironment. Its expression reflects active immune suppression pathways and is closely linked to tumor progression, immune escape, and inflammatory signaling states.

PD-L1 antibody, also referred to as CD274 antibody or B7-H1 antibody, enables detection of PD-L1 across both tumor and immune compartments, including tumor cells, macrophages, dendritic cells, and activated lymphocytes. This dual-compartment expression is a defining feature of PD-L1 biology and is critical for understanding immune checkpoint signaling within complex tissue and cellular systems. Detection across these interacting cell populations supports detailed analysis of tumor-immune crosstalk and immune regulatory networks.

Within the tumor microenvironment, PD-L1 expression is highly dynamic and is frequently induced by inflammatory cytokines such as interferon-gamma. This inducible regulation results in heterogeneous expression patterns across tumor

regions and immune infiltrates, reflecting localized immune activity and adaptive resistance mechanisms. The ability to resolve PD-L1 expression across multiple cell types and microenvironmental niches is essential for interpreting immune context and understanding checkpoint-driven immune modulation.

This clone is further supported by protein microarray specificity validation using a HuProt(TM) platform containing more than 19,000 full-length human proteins. Clone PDL1/2746 demonstrates highly selective binding to PD-L1 with a dominant signal and strong separation from secondary targets, confirming minimal cross-reactivity. This high specificity is particularly important when analyzing complex biological systems such as tumor tissues and mixed cell populations, where accurate discrimination of PD-L1 from related proteins is required for reliable data interpretation.

PD-L1 is a type I transmembrane protein belonging to the B7 family and is primarily localized to the cell surface, where it mediates inhibitory signaling through PD-1. Cytoplasmic pools may also be detected depending on cellular activation state and protein turnover. Its expression is tightly regulated and often correlates with immune activation, tumor inflammation, and cellular stress responses, further emphasizing its role as a dynamic marker of immune status within the tumor microenvironment.

Overall, PD-L1 Antibody / Tumor Microenvironment Immune Checkpoint Antibody enables high-confidence detection of CD274 expression across interacting tumor and immune cell populations. Its ability to resolve heterogeneous expression patterns, combined with microarray-validated specificity, supports detailed investigation of immune checkpoint signaling, tumor-immune interactions, and the functional architecture of the tumor microenvironment.

This PD-L1 antibody is part of a broader PD-L1 antibody panel offered by NSJ Bioreagents.

Application Notes

Optimal dilution of the PD-L1 Antibody / Tumor Microenvironment Immune Checkpoint Antibody should be determined by the researcher.

Immunogen

A portion of amino acids 39-191 from the human protein was used as the immunogen for this PD-L1 antibody.

Storage

Store the PD-L1 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

CD274 antibody, PD-L1 antibody, B7-H1 antibody, Programmed death-ligand 1 antibody, PDCD1 ligand antibody

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