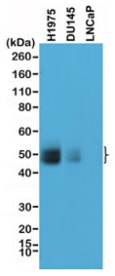
PD-L1 Antibody / Lymphoid Immune Regulation Antibody [clone RM320] (R20345)

Catalog No.	Formulation	Size
R20345-0.1ML	Antibody in PBS with 50% glycerol, 1% BSA and 0.09% sodium azide	100 ul

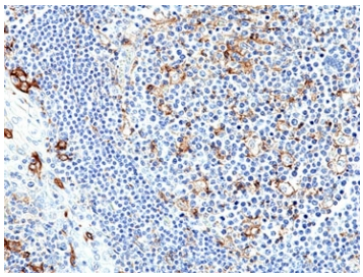
Recombinant RABBIT MONOCLONAL

Bulk quote request

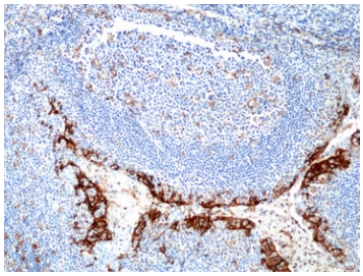
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	RM320
Purity	Protein A purified from animal origin-free supernatant
UniProt	Q9EP73
Localization	Cell surface, cytoplasmic
Applications	Immunohistochemistry (FFPE) : 1:200-1:1000 Western Blot : 1:500-1:1000 Immunocytochemistry : 1:200-1:500
Limitations	This PD-L1 Antibody / Lymphoid Immune Regulation Antibody is available for research use only.



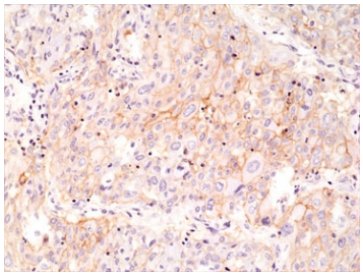
PD-L1 Antibody Western Blot. Western blot analysis of PD-L1 (CD274) expression in human prostate cancer cell line lysates including DU145 and LNCaP using recombinant rabbit monoclonal clone RM320. A band is detected at approximately 45-55 kDa, consistent with glycosylated PD-L1, with possible weaker 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 post-translational glycosylation and relatively low baseline expression in these prostate cancer cell lines.



PD-L1 Antibody Tonsil IHC. Immunohistochemistry analysis of PD-L1 (CD274) expression in FFPE human tonsil using recombinant rabbit monoclonal clone RM320 at 1:250. The antibody demonstrates membranous HRP-DAB brown staining in scattered immune cells within interfollicular regions, consistent with localized immune checkpoint activity. The staining pattern highlights heterogeneous PD-L1 expression across immune cell populations within the lymphoid microenvironment.



PD-L1 Antibody Tonsil Lymphoid Tissue IHC. Immunohistochemistry analysis of PD-L1 (CD274) expression in FFPE human tonsil using recombinant rabbit monoclonal clone RM320 at 1:250. Prominent staining is observed along stromal and immune cell-rich regions, outlining areas of active immune regulation within the lymphoid architecture. The distribution supports compartmentalized PD-L1 expression associated with immune cell interaction zones.



PD-L1 Antibody Lung Cancer IHC. Immunohistochemistry analysis of PD-L1 (CD274) expression in FFPE human lung cancer tissue using recombinant rabbit monoclonal clone RM320 at 1:1000. The antibody demonstrates membranous HRP-DAB brown staining in tumor epithelial cells with additional signal in scattered tumor-associated immune cells, consistent with immune checkpoint activity within the tumor microenvironment. The staining pattern shows heterogeneous expression across tumor regions, supporting evaluation of PD-L1 distribution and tumor-immune interactions.

Description

Programmed death-ligand 1 (CD274), commonly known as PD-L1, is a key immune checkpoint ligand that regulates T cell activation through interaction with PD-1 and plays a central role in maintaining immune homeostasis within lymphoid tissues. PD-L1 Antibody / Lymphoid Immune Regulation Antibody is designed to evaluate checkpoint signaling within organized immune environments, where PD-L1 expression contributes to controlled activation and suppression of adaptive immune responses.

PD-L1 antibody, also referred to as CD274 antibody or B7-H1 antibody, enables detection of PD-L1 across immune cell populations including antigen-presenting cells, macrophages, dendritic cells, and activated lymphocytes. In lymphoid tissues such as tonsil, PD-L1 expression is spatially restricted to specific cellular compartments, reflecting localized immune regulatory activity rather than uniform expression. This compartmentalized distribution is a defining feature of PD-L1 biology in immune tissues and supports interpretation of checkpoint signaling within structured microenvironments.

Immunohistochemistry analysis of lymphoid tissue reveals PD-L1 staining in discrete cell populations within interfollicular regions, stromal networks, and immune cell interaction zones. These areas correspond to sites of antigen presentation and T cell activation, where PD-L1-mediated signaling contributes to modulation of immune responses. The resulting staining pattern is typically heterogeneous, with scattered positive immune cells and stromal elements forming a network-like distribution rather than diffuse tissue-wide expression.

Within the lymphoid microenvironment, PD-L1 expression is dynamically regulated and strongly influenced by inflammatory cytokines such as interferon-gamma. This inducible expression leads to localized upregulation in response to immune activation, producing regionally variable staining intensity that reflects functional immune status. The ability to detect these subtle and spatially restricted expression patterns is essential for accurate assessment of immune checkpoint activity in tissue sections.

This clone is supported by protein microarray specificity validation using a HuProt(TM) platform containing more than

19,000 full-length human proteins. Clone RM320 demonstrates highly selective binding to PD-L1 with strong signal separation from secondary targets, confirming minimal cross-reactivity. This high specificity is particularly important in lymphoid tissues, where closely related immune regulatory proteins are co-expressed and precise target discrimination is required for accurate interpretation.

Western blot analysis further supports detection of PD-L1 protein, with bands observed within the expected molecular weight range corresponding to both unmodified and glycosylated forms. PD-L1 is a known glycoprotein, and this post-translational modification contributes to its variable apparent molecular weight across different cell types and activation states.

PD-L1 is a type I transmembrane protein belonging to the B7 family and is primarily localized to the cell surface, with additional intracellular pools reflecting synthesis and turnover. Its regulated expression within lymphoid tissues underscores its role in balancing immune activation with tolerance, particularly within sites of ongoing immune response.

Overall, PD-L1 Antibody / Lymphoid Immune Regulation Antibody enables high-resolution detection of CD274 expression within organized immune tissues, supporting detailed analysis of checkpoint signaling, immune cell interactions, and spatial regulation of adaptive immune responses within lymphoid environments.

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

Application Notes

The stated application concentrations are suggested starting points. Titration of the PD-L1 Antibody / Lymphoid Immune Regulation Antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A peptide corresponding to the C-terminus of human PD-L1 was used as the immunogen for the recombinant PD-L1 antibody.

Storage

Store the recombinant PD-L1 antibody at -20oC.

Alternate Names

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