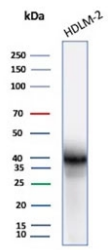
Recombinant PD-L1 Antibody Rabbit Monoclonal PDL1/8195R / B7-H1 [clone PDL1/8195R] (V5622)

Catalog No.	Formulation	Size
V5622-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V5622-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V5622SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

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, kappa
Clone Name	PDL1/8195R
Purity	Protein A/G affinity
UniProt	Q9NZQ7
Localization	Cytoplasm, Cell membrane
Applications	Immunohistochemistry (FFPE): 1-2ug/ml Western blot: 2-4ug/ml
Limitations	This recombinant PD-L1 antibody is available for research use only.



Western blot analysis of PD-L1 antibody in human HDLM-2 cells. Recombinant PD-L1 Antibody Rabbit Monoclonal PDL1/8195R was used to probe a human HDLM-2 cell lysate. Lane 1: HDLM-2 cell lysate. A band is detected at approximately 40-45 kDa, consistent with the predicted molecular weight of Programmed death-ligand 1 (PD-L1 / CD274) following glycosylation. The core protein has a predicted molecular weight of approximately 34 kDa, while glycosylation commonly results in migration between approximately 45-70 kDa on SDS-PAGE, producing the higher apparent molecular weight band observed in western blot analysis.

Description

Programmed death-ligand 1 (PD-L1), also known as CD274 or B7-H1, is a transmembrane immune checkpoint protein that suppresses T cell activity through interaction with the PD-1 receptor. Recombinant PD-L1 Antibody Rabbit Monoclonal PDL1/8195R targets this cell surface immunoregulatory molecule encoded by the CD274 gene. CD274, also known in the literature as Programmed death-ligand 1, B7-H1, or PDCD1 ligand 1, is a type I transmembrane glycoprotein that plays a central role in regulating immune responses through interaction with the PD-1 receptor on T lymphocytes. Because of this biology, PD-L1 antibody detection is widely used in research examining immune checkpoint signaling, tumor immune escape mechanisms, and immune cell interactions within epithelial and lymphoid tissues.

CD274 is a member of the B7 family of immune regulatory ligands and functions primarily through binding to the inhibitory receptor PD-1 (PDCD1) expressed on activated T cells. Engagement of PD-L1 with PD-1 suppresses T cell activation, proliferation, and cytokine production, thereby contributing to peripheral immune tolerance and preventing excessive immune activation. This regulatory pathway is essential for maintaining immune homeostasis. However, many cancers exploit this mechanism by upregulating PD-L1 expression, which allows tumor cells to evade immune surveillance by suppressing cytotoxic T cell activity. Because of this mechanism, CD274 antibody reagents are frequently used in studies investigating tumor immunology, immune checkpoint regulation, and inflammatory signaling pathways.

The CD274 gene is located on chromosome 9p24.1 and encodes a transmembrane glycoprotein containing extracellular immunoglobulin-like domains typical of B7 family members. Under physiological conditions, PD-L1 is expressed on antigen-presenting cells including dendritic cells and macrophages, as well as on some epithelial and endothelial cells. Expression can be strongly induced by inflammatory cytokines, particularly interferon-gamma, which activates transcriptional pathways that increase PD-L1 production during immune responses. In pathological settings such as cancer, PD-L1 expression may become constitutively elevated in tumor epithelial cells and tumor-associated immune cells, linking CD274 expression to regulation of the tumor microenvironment.

Several strong literature synonyms are commonly used for this protein, including PD-L1, Programmed death-ligand 1, B7-H1, PDCD1 ligand 1, and CD274 immune checkpoint protein. Integrating these established names ensures consistent recognition of the CD274 immune checkpoint molecule across immunology, oncology, and pathology research. In tissue-based studies, PD-L1 antibody staining is typically observed as membranous signal in epithelial cells and immune cell populations where the protein functions as a cell surface ligand involved in immune regulation. Clone PDL1/8195R is a recombinant rabbit monoclonal antibody designed to recognize PD-L1 protein expression in formalin-fixed tissue contexts relevant to immune checkpoint research. This PD-L1 antibody is available from NSJ Bioreagents for investigators studying tumor immunology, immune checkpoint signaling, and immune regulation in epithelial and lymphoid tissues.

For additional reagents and information on CD274 signaling and tumor immune evasion, visit our microarray-validated PD-L1 Antibody / Tumor Microenvironment Immune Checkpoint Antibody page.

Application Notes

Optimal dilution of the recombinant PD-L1 antibody rabbit monoclonal PDL1/8195R should be determined by the researcher.

Immunogen

A recombinant fragment (within amino acids 190-290) of human CD274 protein was used as the immunogen for the recombinant PD-L1 antibody.

Storage

Aliquot the recombinant PD-L1 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

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