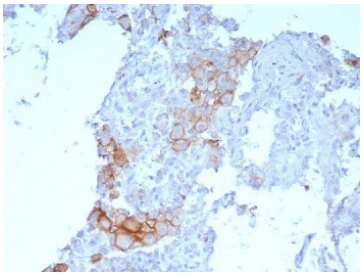
Programmed cell death 1 ligand 1 Antibody Rabbit MAb PDL1/7568R / PDL1 / CD274 [clone PDL1/7568R] (V5287)

Catalog No.	Formulation	Size
V5287-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V5287-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V5287SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

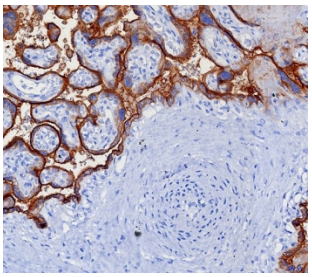
Recombinant RABBIT MONOCLONAL

Bulk quote request

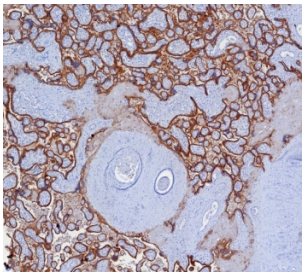
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	PDL1/7568R
Purity	Protein A/G affinity
UniProt	Q9NZQ7
Localization	Cell Surface, Cytoplasm
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT
Limitations	This Programmed cell death 1 ligand 1 antibody is available for research use only.



Immunohistochemistry analysis of PD-L1 antibody in human lung squamous cell carcinoma. Programmed cell death 1 ligand 1 Antibody Rabbit MAb PDL1/7568R was used for immunohistochemistry on FFPE human lung squamous cell carcinoma tissue. Distinct HRP-DAB brown membranous staining is observed in tumor epithelial cells, consistent with the cell surface localization of Programmed death-ligand 1 (PD-L1 / CD274), an immune checkpoint ligand that regulates T cell responses within the tumor microenvironment. The staining highlights clusters of malignant squamous epithelial cells showing membranous PD-L1 expression, while surrounding stromal elements display minimal signal. The rabbit monoclonal antibody clone PDL1/7568R detects PD-L1 expression in tumor cells of lung squamous cell carcinoma following heat-induced epitope retrieval using pH 9 Tris-EDTA buffer.



IHC staining of FFPE human placental tissue with Programmed cell death 1 ligand 1 antibody (clone PDL1/7568R). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE human placental tissue with Programmed cell death 1 ligand 1 antibody rabbit mAb (clone PDL1/7568R). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.

Description

Programmed death-ligand 1, encoded by the CD274 gene, is an immune checkpoint ligand that plays a central role in regulating T cell activity and maintaining immune tolerance. Programmed cell death 1 ligand 1 Antibody Rabbit MAb PDL1/7568R targets this cell surface immunomodulatory protein, which is widely known in the literature as PD-L1, B7-H1, or CD274. PD-L1 is a type I transmembrane glycoprotein belonging to the B7 family of immune regulatory molecules and functions primarily through interaction with the inhibitory receptor PD-1 expressed on activated T lymphocytes. Because of this biology, PD-L1 antibody detection is widely used in research examining immune checkpoint signaling, tumor immune evasion, and immune regulation within epithelial and immune cell populations.

Programmed death-ligand 1 acts as a key regulator of immune responses by binding the PD-1 receptor (encoded by PDCD1) on T cells. Engagement of PD-L1 with PD-1 transmits inhibitory signals that reduce T cell proliferation, cytokine secretion, and cytotoxic activity. This checkpoint pathway is essential for maintaining peripheral immune tolerance and preventing excessive immune-mediated tissue damage. However, many tumors exploit this regulatory system by upregulating PD-L1 expression on tumor epithelial cells and tumor-associated immune cells. Elevated PD-L1 expression suppresses anti-tumor immune responses and contributes to immune escape mechanisms within the tumor microenvironment. For this reason, CD274 antibody reagents are frequently used in studies investigating tumor immunology and immune checkpoint biology.

The CD274 gene is located on chromosome 9p24.1 and encodes a transmembrane glycoprotein containing extracellular immunoglobulin-like domains typical of B7 family members. PD-L1 expression can be detected on antigen-presenting cells such as dendritic cells and macrophages as well as on various epithelial and endothelial cell types. Expression is strongly induced by inflammatory cytokines, particularly interferon-gamma, which activates transcriptional pathways that increase PD-L1 expression during immune responses. In many cancers, constitutive PD-L1 expression occurs in tumor epithelial cells and infiltrating immune cells, linking CD274 to regulation of immune responses within the tumor microenvironment.

Several strong literature synonyms are commonly used for this protein, including PD-L1, Programmed death-ligand 1, B7-H1, and PDCD1 ligand 1. These established names help ensure consistent recognition of this immune checkpoint ligand 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 regulating T cell responses. Clone PDL1/7568R is a rabbit monoclonal antibody designed to recognize PD-L1 protein expression in research applications involving immune checkpoint signaling and tumor immunology. This PD-L1 antibody is available from NSJ Bioreagents for investigators studying immune regulation, tumor immune interactions, and inflammatory signaling pathways.

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

Application Notes

Optimal dilution of the Programmed cell death 1 ligand 1 Antibody rabbit mAb PDL1/7568R should be determined by the researcher.

Immunogen

A recombinant partial protein sequence (within amino acids 190-290) from the human protein was used as the immunogen for the rabbit mAb Programmed cell death 1 ligand 1 antibody.

Storage

Aliquot the Programmed cell death 1 ligand 1 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.