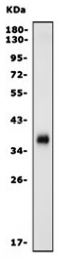
Programmed death ligand 1 Antibody Rabbit Polyclonal (RQ6346)

Catalog No.	Formulation	Size
RQ6346	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Mouse
Format	Purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	Q9EP73
Applications	Western blot: 0.5-1ug/ml Direct ELISA: 0.1-0.5ug/ml
Limitations	This Programmed death ligand 1 antibody is available for research use only.



Western blot testing of mouse thymus with Programmed death ligand 1 antibody rabbit polyclonal. Predicted molecular weight: 34-70 kDa depending on glycosylation level.

Description

Programmed death-ligand 1 (PD-L1), encoded by the CD274 gene, is a type I transmembrane immune checkpoint protein belonging to the B7 family of immunoregulatory molecules. Programmed death ligand 1 Antibody Rabbit Polyclonal recognizes this widely studied immune checkpoint ligand, which is commonly referred to in the literature as PD-L1, CD274, or B7-H1. PD-L1 functions as the primary ligand for the programmed cell death protein 1 (PD-1) receptor expressed on activated T lymphocytes. Engagement of PD-L1 with PD-1 delivers inhibitory signals that suppress T cell proliferation, cytokine production, and cytotoxic responses, helping regulate immune activation and maintain immune

tolerance within tissues exposed to inflammatory signals.

PD-L1 is normally expressed on antigen-presenting cells including dendritic cells, macrophages, and activated B cells, as well as on certain epithelial and endothelial cell populations. Expression of CD274 can be strongly induced by inflammatory cytokines, particularly interferon-gamma, which activates transcriptional signaling pathways that increase PD-L1 production during immune responses. Through these mechanisms, PD-L1 acts as an important regulator of immune homeostasis by limiting excessive immune activation and preventing tissue damage caused by uncontrolled immune responses.

The CD274 gene is located on chromosome 9p24.1 and encodes a glycosylated membrane protein containing extracellular immunoglobulin-like domains typical of B7 family ligands. PD-L1 is primarily localized to the plasma membrane where it functions as a ligand for PD-1 on T cells. The protein undergoes extensive N-linked glycosylation, a modification that influences protein stability, cell surface localization, and receptor interaction. Because of these post-translational modifications, biochemical studies often observe PD-L1 as multiple forms representing glycosylated variants of the protein. These structural and regulatory features make CD274 antibody reagents useful tools for investigating immune checkpoint signaling pathways and the molecular regulation of immune responses.

Several well-established synonyms are associated with this immune checkpoint ligand, including PD-L1, Programmed death-ligand 1, B7-H1, and PDCD1 ligand 1. These alternate names are widely used across immunology, oncology, and molecular biology research. PD-L1 expression has been extensively studied in the context of tumor immunology because many cancers increase PD-L1 levels on malignant epithelial cells or tumor-associated immune cells. This elevated expression enables tumor cells to suppress anti-tumor immune responses and evade immune surveillance. As a result, CD274 antibody reagents are frequently used in studies investigating immune checkpoint signaling, tumor immune evasion, and inflammatory regulation within the tumor microenvironment. This rabbit polyclonal Programmed death ligand 1 antibody is suitable for detecting PD-L1 expression in research applications and is available from NSJ Bioreagents.

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 Programmed death ligand 1 antibody rabbit polyclonal should be determined by the researcher.

Immunogen

Recombinant mouse protein (amino acids E45-H239) was used as the immunogen for the Programmed death ligand 1 antibody.

Storage

After reconstitution, the Programmed death ligand 1 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

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