

# CD274 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP14682b

# **Specification**

# CD274 Antibody (C-term) - Product Information

WB,E Application **Primary Accession 09NZ07** NP 054862.1 Other Accession Reactivity Human Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG Antigen Region 261-290

# CD274 Antibody (C-term) - Additional Information

#### **Gene ID 29126**

# **Other Names**

Programmed cell death 1 ligand 1, PD-L1, PDCD1 ligand 1, Programmed death ligand 1, B7 homolog 1, B7-H1, CD274, CD274, B7H1, PDCD1L1, PDCD1LG1, PDL1

#### Target/Specificity

This CD274 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 261-290 amino acids from the C-terminal region of human CD274.

# **Dilution**

WB~~1:2000

E~~Use at an assay dependent concentration.

### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

# **Precautions**

CD274 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

# CD274 Antibody (C-term) - Protein Information

# Name CD274 (<u>HGNC:17635</u>)

Function Plays a critical role in induction and maintenance of immune tolerance to self



(PubMed:<u>11015443</u>, PubMed:<u>28813410</u>, PubMed:<u>28813417</u>, PubMed:<u>31399419</u>). As a ligand for the inhibitory receptor PDCD1/PD-1, modulates the activation threshold of T-cells and limits T-cell effector response (PubMed:<u>11015443</u>, PubMed:<u>28813410</u>, PubMed:<u>28813417</u>, PubMed:<u>36727298</u>). Through a yet unknown activating receptor, may costimulate T-cell subsets that predominantly produce interleukin-10 (IL10) (PubMed:<u>10581077</u>). Can also act as a transcription coactivator: in response to hypoxia, translocates into the nucleus via its interaction with phosphorylated STAT3 and promotes transcription of GSDMC, leading to pyroptosis (PubMed:<u>32929201</u>).

### **Cellular Location**

Cell membrane; Single-pass type I membrane protein. Early endosome membrane; Single-pass type I membrane protein. Recycling endosome membrane; Single-pass type I membrane protein. Nucleus. Note=Associates with CMTM6 at recycling endosomes, where it is protected from being targeted for lysosomal degradation (PubMed:28813417). Translocates to the nucleus in response to hypoxia via its interaction with phosphorylated STAT3 (PubMed:32929201). [Isoform 2]: Endomembrane system; Single-pass type I membrane protein

#### **Tissue Location**

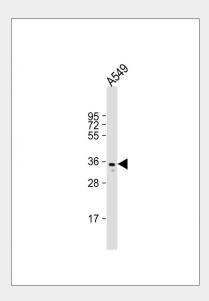
Highly expressed in the heart, skeletal muscle, placenta and lung. Weakly expressed in the thymus, spleen, kidney and liver. Expressed on activated T- and B-cells, dendritic cells, keratinocytes and monocytes.

# CD274 Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

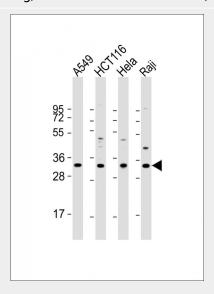
# CD274 Antibody (C-term) - Images



Anti-CD274 Antibody (C-term) at 1:2000 dilution + A549 whole cell lysate Lysates/proteins at 20



μg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size: 33 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



All lanes : Anti-CD274 Antibody (C-term) at 1:2000 dilution Lane 1: A549 whole cell lysate Lane 2: HCT116 whole cell lysate Lane 3: Hela whole cell lysate Lane 4: Raji whole cell lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 33 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

# CD274 Antibody (C-term) - Background

Involved in the costimulatory signal, essential for T-cell proliferation and production of IL10 and IFNG, in an IL2-dependent and a PDCD1-independent manner. Interaction with PDCD1 inhibits T-cell proliferation and cytokine production.

# CD274 Antibody (C-term) - References

Berthon, C., et al. Cancer Immunol. Immunother. 59(12):1839-1849(2010) Dianzani, C., et al. J. Immunol. 185(7):3970-3979(2010) Shimada, M., et al. Hum. Genet. 128(4):433-441(2010) Alvarez, I.B., et al. J. Infect. Dis. 202(4):524-532(2010) Francisco, L.M., et al. Immunol. Rev. 236, 219-242 (2010) :