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CD274 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP14682b

Product Information

Application	WB, E
Primary Accession	Q9NZQ7
Other Accession	NP_054862.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB34555
Calculated MW	33275
Antigen Region	261-290

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.

Protein Information

Name	CD274 (HGNC:17635)
Function	Plays a critical role in induction and maintenance of immune tolerance to self (PubMed:11015443, PubMed:28813410, PubMed:28813417,

	PubMed:31399419). As a ligand for the inhibitory receptor PDCD1/PD-1, modulates the activation threshold of T-cells and limits T-cell effector response (PubMed:11015443, PubMed:28813410, PubMed:28813417, PubMed:36727298). Through a yet unknown activating receptor, may costimulate T-cell subsets that predominantly produce interleukin-10 (IL10) (PubMed:10581077). 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:32929201).
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.

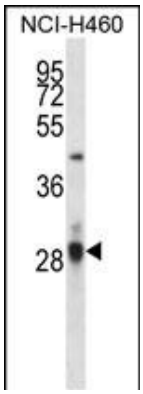
Background

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.

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) :

Images



CD274 Antibody (C-term) (Cat. #AP14682b) western blot analysis in NCI-H460 cell line lysates (35ug/lane).This demonstrates the CD274 antibody detected the CD274 protein (arrow).