

CD274 Antibody (C-term) Blocking Peptide Synthetic peptide

Catalog # BP14682b

Specification

CD274 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession

<u>Q9NZQ7</u>

CD274 Antibody (C-term) Blocking Peptide - 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

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions This product is for research use only. Not for use in diagnostic or therapeutic procedures.

CD274 Antibody (C-term) Blocking Peptide - Protein Information

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

Function

Plays a critical role in induction and maintenance of immune tolerance to self (PubMed:11015443, PubMed:28813417, PubMed:28813410). 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:28813417, PubMed:28813417, PubMed:28813417, PubMed:28813417, PubMed:28813410). 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.

CD274 Antibody (C-term) Blocking Peptide - Protocols

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

Blocking Peptides

CD274 Antibody (C-term) Blocking Peptide - Images

CD274 Antibody (C-term) Blocking Peptide - 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) Blocking Peptide - 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) :