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Anti-PD-L1/B7-H1 Picoband Antibody

Catalog # ABO10020

Product Information

Application	WB
Primary Accession	Q9NZQ7
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Programmed cell death 1 ligand 1(CD274) detection. Tested with WB in Human.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

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
Calculated MW	33275
Application Details	Western blot, 0.1-0.5 □g/ml, Human
Subcellular Localization	Isoform 1: Cell membrane; Single-pass type I membrane protein.
Tissue Specificity	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. .
Source	Eukaryota
Protein Name	Programmed cell death 1 ligand 1
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human PD-L1/B7-H1 (41-69aa KFPVEKQLDLAALIVYWEMEDKNIIQFVH), different from the related mouse sequence by ten amino acids.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins.

Storage	At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.

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

Programmed death-ligand 1 (PD-L1), also known as CD274 or B7-H1, is a protein that in humans is encoded by the CD274 gene. It is mapped to 9p24.1. PD-L1 is a 40kDa type 1 transmembrane protein that has been speculated to play a major role in suppressing the immune system during particular events such as pregnancy, tissue allografts, autoimmune disease and other disease states such as hepatitis. It has been concluded that upregulation of PD-L1 on tumor MDCs downregulates T-cell immunity and that PD-L1 blockade may represent an approach for cancer immunotherapy. Additionally, PD-L1 can provide positive costimulatory signals for innate and adaptive immunity and for protection against intracellular bacterial infection. What □€™s more, it has been found that PD1/PDL1 pathway may be a good target for restoring antitumor immunity in ovarian cancer.

Images

Western blot analysis of PD-L1/B7-H1 expression in HELA whole cell lysates (lane 1). PD-L1/B7-H1 at 62KD was detected using rabbit anti- PD-L1/B7-H1 Antigen Affinity purified polyclonal antibody (Catalog # ABO10020) at 0.5 □¼g/mL. The blot was developed using chemiluminescence (ECL) method .



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