

PDL1 Antibody [6H10]

Catalog # ASC12139

Product Information

Application WB, IHC-P, IF, ICC, E

Primary Accession

Other Accession

Host

Clonality

Isotype

Clone Names

OgNZQ7

NP_054862

Mouse

Monoclonal

IgG1

CD274

Additional Information

Calculated MW

Gene ID 29126 **Alias Symbol** CD274

Other Names PD-L1 Antibody: Programmed cell death 1 ligand-1, programmed death ligand

1, PDL1, PDL-1, B7-H1

Target/Specificity PD-L1 Antibody has no cross-reactivity to PD-L2.

33275

Reconstitution & Storage PD-L1 antibody can be stored at 4°C for three months and -20°C, stable for

up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high

temperatures.

Precautions PDL1 Antibody [6H10] is for research use only and not for use in diagnostic or

therapeutic procedures.

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: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

phosphorylated STAT3 and promotes transcription of GSDMC, leading to

to hypoxia, translocates into the nucleus via its interaction with

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

PD-L1 plays a critical role in induction and maintenance of immune tolerance to self. As a ligand for the inhibitory receptor PDCD1/CD279, PD-L1 modulates the activation threshold of T-cells and limits T-cell effector response (1). The PDCD1/CD279-mediated inhibitory pathway is exploited by tumors to attenuate anti-tumor immunity and facilitate tumor survival (2,3). Through a yet unknown activating receptor, it may costimulate T-cell subsets that predominantly produce interleukin-10 (IL10) (4).

References

Freeman et al. Exp. Med. 2000; 192:1027-34.Burr et al. Nature 2017; 549:101-5.Mezzadra et al. Nature 2017; 549:106-10.Dong et al. Nat. Med. 1999 5:1365-9.

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