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Anti-B7-H1 / PD-L1 / CD274 Reference Antibody (avelumab)

Recombinant Antibody
Catalog # APR10202

Product Information

Application	Functional assay, Kinetics (SPR), Kinetics (BLI), FACS, E, FTA
Primary Accession	Q9NZQ7
Clonality	Monoclonal
Isotype	Human IgG1
Calculated MW	33275

Additional Information

Target/Specificity	B7-H1 / PD-L1 / CD274
Endotoxin	
Conjugation	Unconjugated
Expression system	CHO
Format	Purified monoclonal antibody supplied in PBS, pH6.0, without preservative.This antibody is purified through a protein A column.

Protein Information

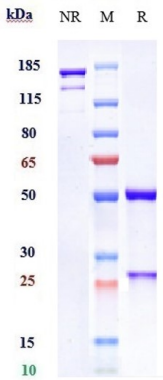
Name	CD274 (HGNC:17635)
Function	Plays a critical role in induction and maintenance of immune tolerance to self (PubMed:11015443, PubMed:28813410, PubMed:28813417, PubMed:31399419). As a ligand for the inhibitory receptor PDCD1/PD-1, modulates the activation threshold of T-cells and limits T-cell effector 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

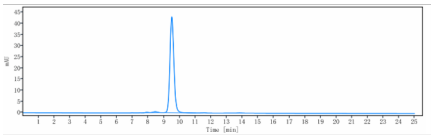
Tissue Location

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.

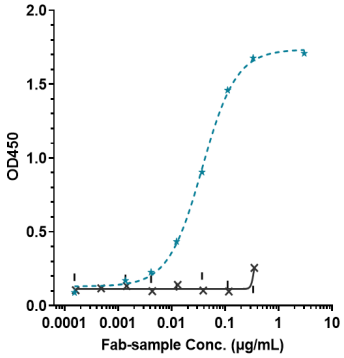
Images



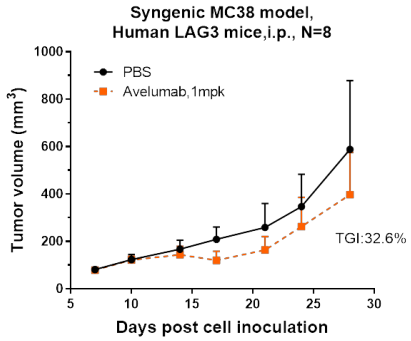
Anti- Human/Mouse/Monkey PD-L1(Avelumab) on SDS-PAGE under reducing (R) condition. The purity of the protein is greater than 95%.



The purity of Anti- Human/Mouse/Monkey PD-L1(Avelumab) is 98.22%, determined by SEC-HPLC.

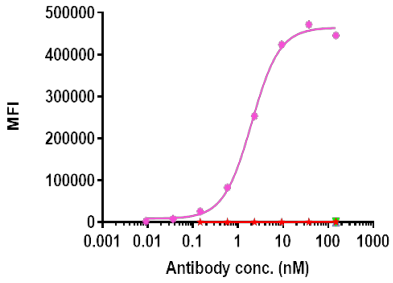


Immobilized human PD-L1 (FC Tag, 2 μg/mL) can bind to Anti- Human/Mouse/Monkey PD-L1(Avelumab) with an EC50 of 0.03725 ug/mL.



Anti- Human/Mouse/Monkey PD-L1(Avelumab) inhibited the tumor growth of MC38 on hLAG3 mice. The result showed significant anti-tumor effects, with an tumor inhibition rate (TGI) of 32.6% at 1 mpk at D28.

Human PD-L1-expressing CHO-K cells were stained with Anti- Human/Mouse/Monkey PD-L1(Avelumab) , with isotype and secondary-only controls. Flow analysis showed specific binding of the antibody, with an EC50 of 2.02 nM.



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