

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

Recombinant Antibody
Catalog # APR10202

Product Information

Application	FC, Kinetics, Animal Model
Primary Accession	Q9NZQ7
Reactivity	Human, Mouse, Rat, Rabbit, Dog
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	33275

Additional Information

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

Protein Information

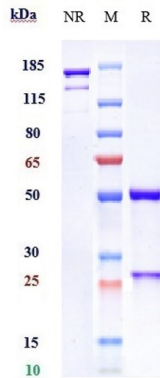
Name	CD274 (HGNC:17635)
Function	Plays a critical role in induction and maintenance of immune tolerance to self (PubMed: 11015443 , PubMed: 28813410 , PubMed: 28813417 , PubMed: 31399419). As a ligand for the inhibitory receptor PDCD1/PD-1, modulates the activation threshold of T-cells and limits T-cell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

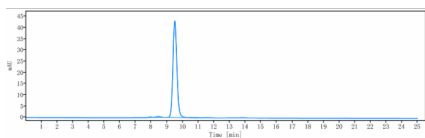
Tissue Location

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.

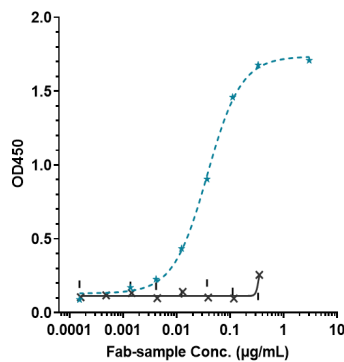
Images



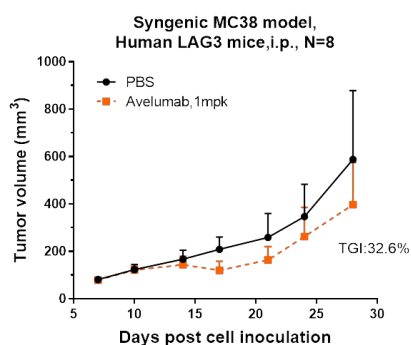
Anti-B7-H1 / PD-L1 / CD274 Reference Antibody (avelumab) on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%



The purity of Anti-B7-H1 / PD-L1 / CD274 Reference Antibody (avelumab) is more than 98.22%, determined by SEC-HPLC.



Immobilized human PD L1 FC at 2 µg/mL can bind Anti-B7-H1 / PD-L1 / CD274 Reference Antibody (avelumab), $EC_{50}=0.03725$ µg/mL



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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.