

**Anti-B7-H1 / PD-L1 / CD274 Reference Antibody (avelumab)
Recombinant Antibody
Catalog # APR10202****Specification**

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

Application	FC, E, FTA
Primary Accession	O9NZQ7
Reactivity	Rat, Dog, Cynomolgus, Human, Mouse, Rabbit
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	150 KDa

Anti-B7-H1 / PD-L1 / CD274 Reference Antibody (avelumab) - Additional Information**Target/Specificity**

B7-H1 / PD-L1 / CD274

Endotoxin

< 0.001EU/ µg, determined by LAL method.

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.

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

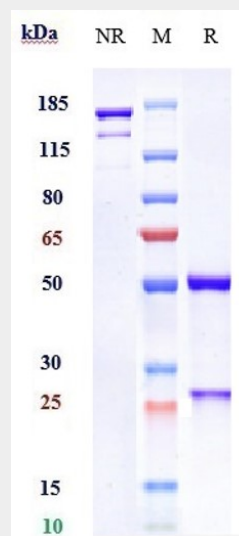
Highly expressed in the heart, skeletal muscle, placenta and lung. Weakly expressed in the thymus, spleen, kidney and liver. Expressed on activated T- and B-cells, dendritic cells, keratinocytes and monocytes.

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

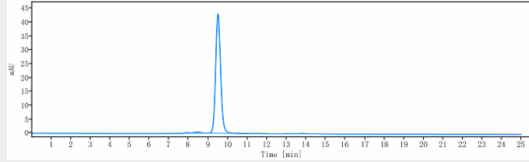
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

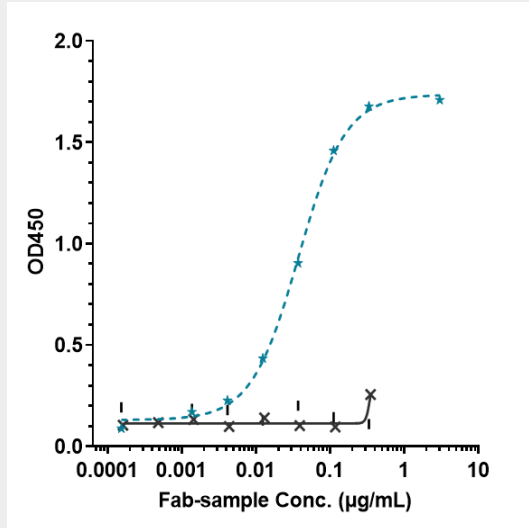
Anti-B7-H1 / PD-L1 / CD274 Reference Antibody (avelumab) - Images



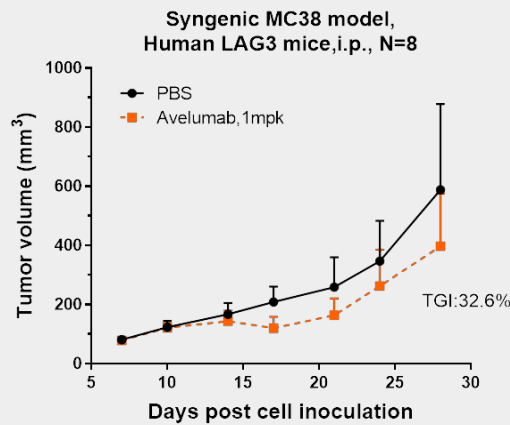
Anti-B7-H1 / PD-L1 / CD274 Reference Antibody (avelumab) on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%



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) EC50=0.03725 µg/mL



Avelumab inhibited the tumor growth of MC38 on hLAG3 mice. The result showed significant anti-tumor effects, with a tumor inhibition rate (TGI) of 32.6% at 1 mpk at D28.