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

Recombinant Antibody
Catalog # APR10203

Specification

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

Application	**FC, Kinetics, Animal Model**
Primary Accession	Q9NZQ7
Reactivity	**Human**
Clonality	**Monoclonal**
Isotype	**IgG1**
Calculated MW	**145 KDa**

Anti-B7-H1 / PD-L1 / CD274 Reference Antibody (atezolizumab) - 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 (atezolizumab) - 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:<a

href="http://www.uniprot.org/citations/10581077" target="_blank">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

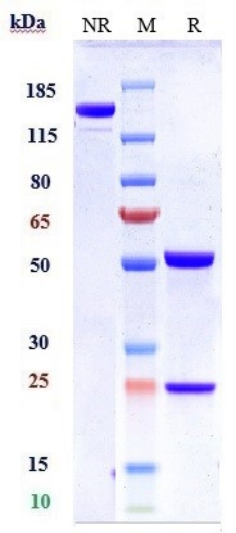
Tissue Location
Highly expressed in the heart, skeletal muscle, placenta and lung. Weakly expressed in the thymus, spleen, kidney and liver. Expressed on activated T- and B-cells, dendritic cells, keratinocytes and monocytes.

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

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

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



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

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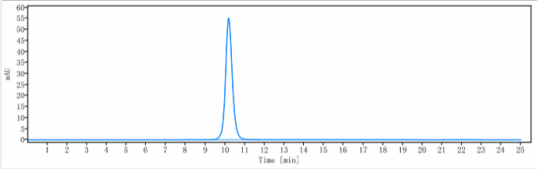
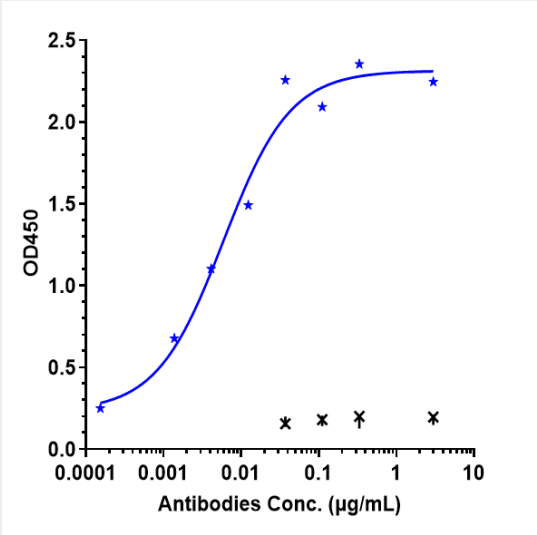
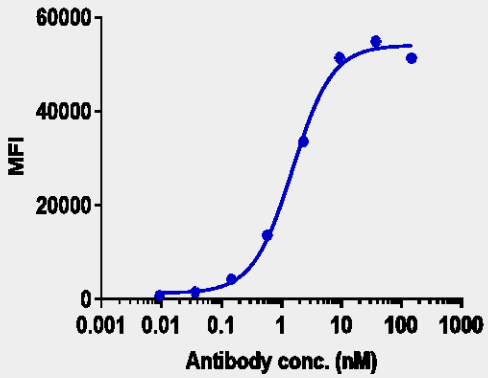


The purity of Anti-B7-H1 / PD-L1 / CD274 Reference Antibody (atezolizumab)is more than 100% ,determined by SEC-HPLC.



Immobilized human PD L1 His at 2 μg/mL can bind Anti-B7-H1 / PD-L1 / CD274 Reference Antibody (atezolizumab)EC50=0.005894 μg/mL



Human PD-L1 CHO-K cells were stained with Anti-B7-H1 / PD-L1 / CD274 Reference Antibody (atezolizumab) and negative control protein respectively, washed and then followed by PE and analyzed with FACS, EC263=1.533 nM

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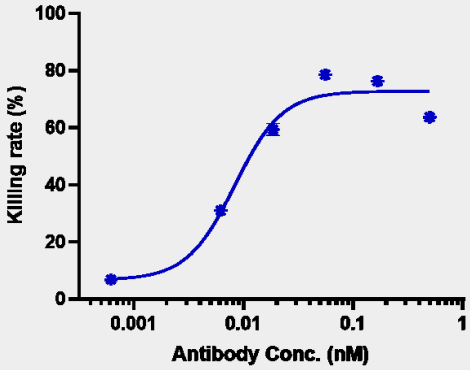
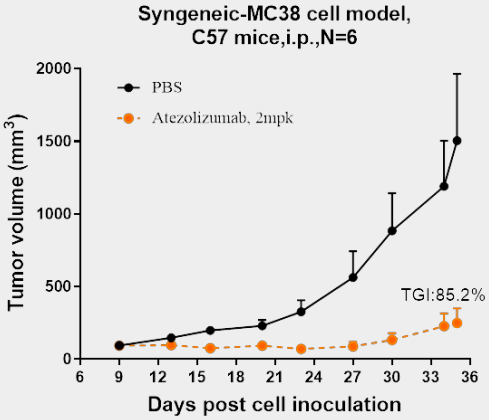


The endocytosis ratio atezolizumab by HCC827 increased with the increase of antibody concentration, and the Internalization Rate (%) reached 60% at antibody concentration of 0.5 nM.



Atezolizumab inhibited the tumor growth of MC38 on C57BL/6N mice. The result showed significant anti-tumor effects, with an tumor inhibition rate (TGI) of 85.2% at 2 mpk at D35.