

**Anti-B7-H1 / PD-L1 / CD274 Reference Antibody (atezolizumab)  
Recombinant Antibody  
Catalog # APR10203****Specification**

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

|                   |                        |
|-------------------|------------------------|
| Application       | FC, E, FTA             |
| Primary Accession | <a href="#">O9NZQ7</a> |
| Reactivity        | Cynomolgus, 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](http://www.uniprot.org/citations/11015443), PubMed: [28813410](http://www.uniprot.org/citations/28813410), PubMed: [28813417](http://www.uniprot.org/citations/28813417), PubMed: [31399419](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/11015443), PubMed: [28813410](http://www.uniprot.org/citations/28813410), PubMed: [28813417](http://www.uniprot.org/citations/28813417), PubMed: [36727298](http://www.uniprot.org/citations/36727298)). Through a yet unknown activating receptor, may costimulate T-cell subsets that predominantly produce interleukin-10 (IL10) (PubMed:

<http://www.uniprot.org/citations/10581077> target="\_blank">10581077</a>). 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:<a href="http://www.uniprot.org/citations/32929201" target="\_blank">32929201</a>).

#### 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

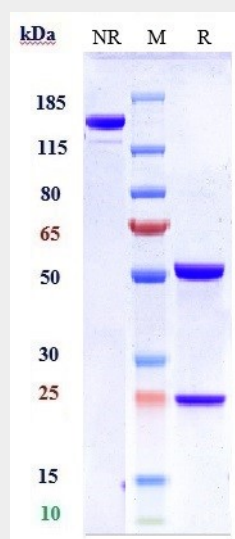
Highly expressed in the heart, skeletal muscle, placenta and lung. Weakly expressed in the thymus, spleen, kidney and liver. Expressed on activated T- and B-cells, dendritic cells, keratinocytes and monocytes.

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

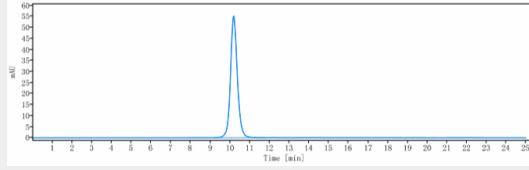
Provided below are standard protocols that you may find useful for product applications.

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

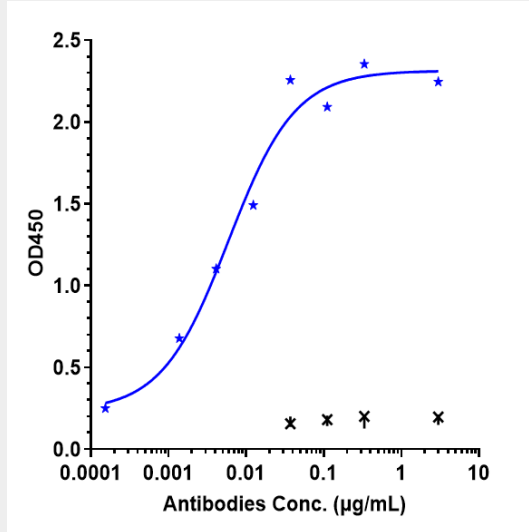
### Anti-B7-H1 / PD-L1 / CD274 Reference Antibody (atezolizumab) - Images



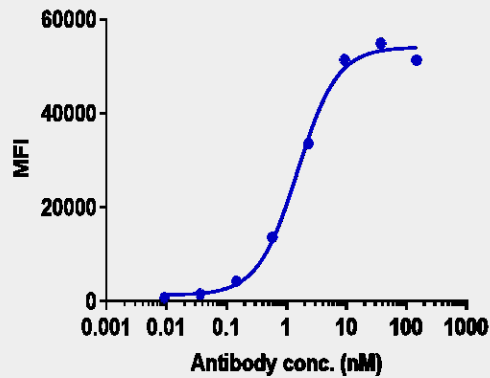
Anti-B7-H1 / PD-L1 / CD274 Reference Antibody (atezolizumab) on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%



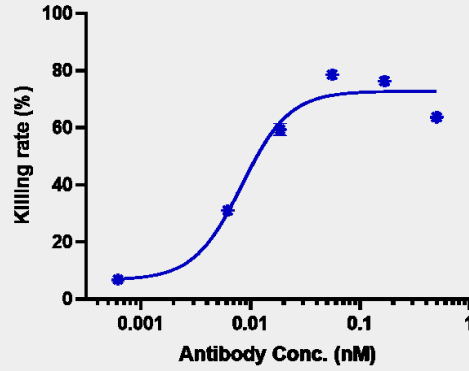
The purity of Anti-B7-H1 / PD-L1 / CD274 Reference Antibody (atezolizumab) is more than 100% determined by SEC-HPLC.



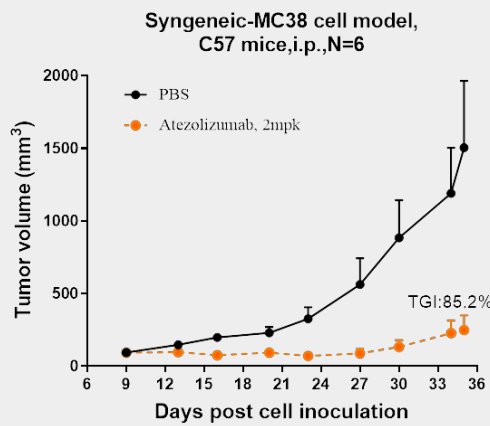
Immobilized human PD L1 His at 2 µg/mL can bind Anti-B7-H1 / PD-L1 / CD274 Reference Antibody (atezolizumab)  $EC_{50}=0.005894$  µg/mL



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,  $EC_{263}=1.533$  nM



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.