

**Anti-PDCD1 / PD-1 / CD279 Reference Antibody (pembrolizumab)  
Recombinant Antibody  
Catalog # APR10246****Specification****Anti-PDCD1 / PD-1 / CD279 Reference Antibody (pembrolizumab) - Product Information**

Application	FC, Kinetics, Animal Model
Primary Accession	<a href="#">Q15116</a>
Reactivity	Human
Clonality	Monoclonal
Isotype	IgG4SP
Calculated MW	143.44 KDa

**Anti-PDCD1 / PD-1 / CD279 Reference Antibody (pembrolizumab) - Additional Information****Target/Specificity**

PDCD1 / PD-1 / CD279

**Endotoxin**

&lt; 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-PDCD1 / PD-1 / CD279 Reference Antibody (pembrolizumab) - Protein Information****Name** PDCD1 {ECO:0000303|PubMed:7851902, ECO:0000312|HGNC:HGNC:8760}**Function**

Inhibitory receptor on antigen activated T-cells that plays a critical role in induction and maintenance of immune tolerance to self (PubMed:<a href="http://www.uniprot.org/citations/21276005" target="\_blank">21276005</a>, PubMed:<a href="http://www.uniprot.org/citations/37208329" target="\_blank">37208329</a>). Delivers inhibitory signals upon binding to ligands CD274/PDCD1L1 and CD273/PDCD1LG2 (PubMed:<a href="http://www.uniprot.org/citations/21276005" target="\_blank">21276005</a>). Following T-cell receptor (TCR) engagement, PDCD1 associates with CD3- TCR in the immunological synapse and directly inhibits T-cell activation (By similarity). Suppresses T-cell activation through the recruitment of PTPN11/SHP-2: following ligand-binding, PDCD1 is phosphorylated within the ITSM motif, leading to the recruitment of the protein tyrosine phosphatase PTPN11/SHP-2 that mediates dephosphorylation of key TCR proximal signaling molecules, such as ZAP70, PRKCQ/PKCtheta and CD247/CD3zeta (By similarity).

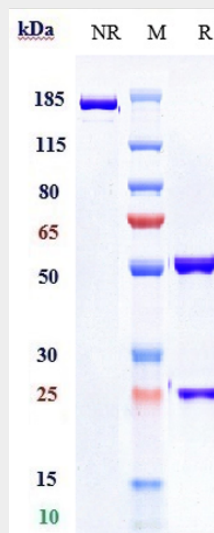
**Cellular Location**

Cell membrane; Single-pass type I membrane protein

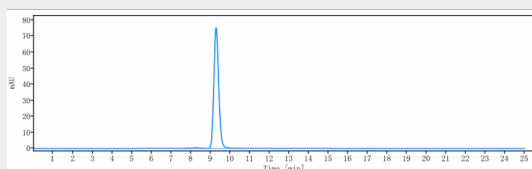
**Anti-PDCD1 / PD-1 / CD279 Reference Antibody (pembrolizumab) - Protocols**

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

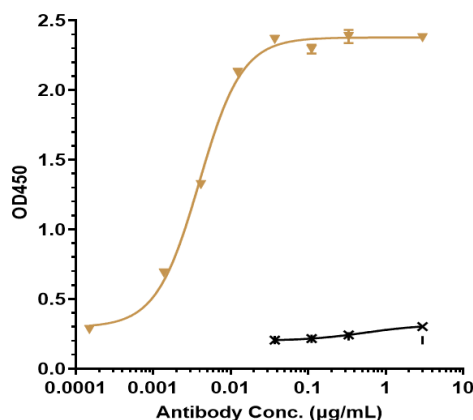
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)

**Anti-PDCD1 / PD-1 / CD279 Reference Antibody (pembrolizumab) - Images**

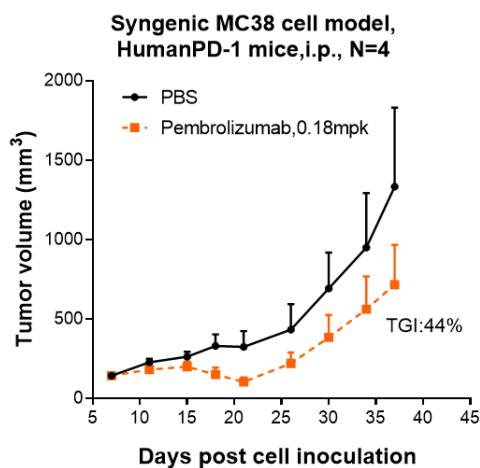
Anti-PDCD1 / PD-1 / CD279 Reference Antibody (pembrolizumab) on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%



The purity of Anti-PDCD1 / PD-1 / CD279 Reference Antibody (pembrolizumab) is more than 95%, determined by SEC-HPLC.



Immobilized human PD 1 His at 2 µg/mL can bind Anti-PDCD1 / PD-1 / CD279 Reference Antibody (pembrolizumab) □EC<sub>50</sub>=0.0039 µg/mL



Pembrolizumab inhibited the tumor growth of MC38 on human PD-1 mice. The result showed significant anti-tumor effects, with an tumor inhibition rate (TGI) of 44.0% at 0.18 mpk at D37.