

**Anti-PDCD1 / PD-1 / CD279 Reference Antibody (nivolumab)  
Recombinant Antibody  
Catalog # APR10166****Specification****Anti-PDCD1 / PD-1 / CD279 Reference Antibody (nivolumab) - Product Information**

Application	FC, E, FTA
Primary Accession	<a href="#">Q15116</a>
Reactivity	Cynomolgus, Human
Clonality	Monoclonal
Isotype	IgG4
Calculated MW	145.24 KDa

**Anti-PDCD1 / PD-1 / CD279 Reference Antibody (nivolumab) - 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 (nivolumab) - 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: [21276005](http://www.uniprot.org/citations/21276005)). Delivers inhibitory signals upon binding to ligands CD274/PDCD1L1 and CD273/PDCD1LG2 (PubMed: [21276005](http://www.uniprot.org/citations/21276005)). 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/PKtheta and CD247/CD3zeta (By similarity).

### Cellular Location

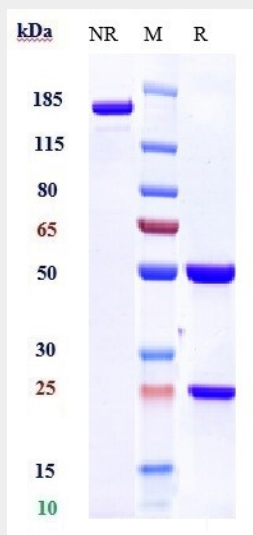
Cell membrane; Single-pass type I membrane protein

### Anti-PDCD1 / PD-1 / CD279 Reference Antibody (nivolumab) - Protocols

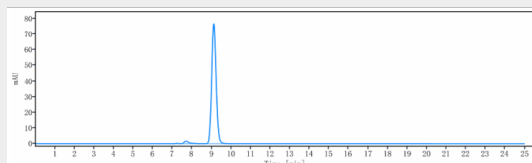
Provided below are standard protocols that you may find useful for product applications.

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

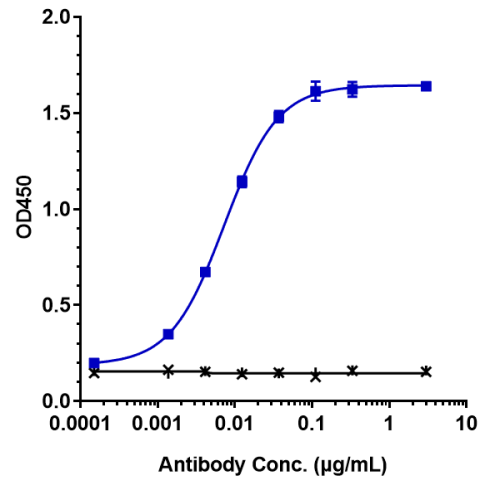
### Anti-PDCD1 / PD-1 / CD279 Reference Antibody (nivolumab) - Images



Anti-PDCD1 / PD-1 / CD279 Reference Antibody (nivolumab) 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 (nivolumab) is more than 99.03%, determined by SEC-HPLC.



Immobilized human PD 1 His at 2 µg/mL can bind Anti-PDCD1 / PD-1 / CD279 Reference Antibody (nivolumab) □ EC50=0.007274 µg/mL