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

Recombinant Antibody
Catalog # APR10170

## Product Information

| | |
|---|---|
| **Application** | Functional assay, Kinetics (SPR), Kinetics (BLI), FACS, E, FTA |
| **Primary Accession** | Q15116 |
| **Reactivity** | Human |
| **Clonality** | Monoclonal |
| **Isotype** | IgG4SP |
| **Calculated MW** | 31647 |

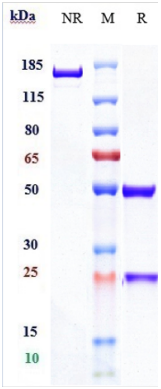
## Additional Information

| | |
|---|---|
| **Target/Specificity** | PDCD1 / PD-1 / CD279 |
| **Endotoxin Conjugation** | Unconjugated |
| **Expression system** | CHO |
| **Format** | Purified monoclonal antibody supplied in PBS, pH6.0, without preservative.This antibody is purified through a protein A column. |

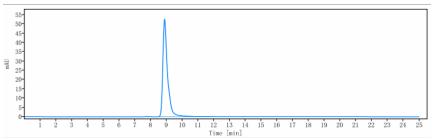
## Protein Information

| | |
|---|---|
| **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, PubMed:31754127, PubMed:32184441, PubMed:37208329). Delivers inhibitory signals upon binding to ligands CD274/PDCD1L1 and CD273/PDCD1LG2 (PubMed:21276005, PubMed:26602187). Following T-cell receptor (TCR) engagement, PDCD1 associates with TCR-CD3 in the immunological synapse and directly inhibits T-cell activation (PubMed:32184441). 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 (PubMed:32184441). |
| **Cellular Location** | Cell membrane; Single-pass type I membrane protein |

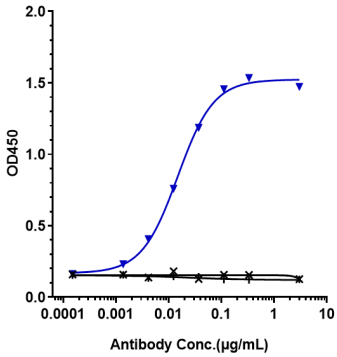
## Images



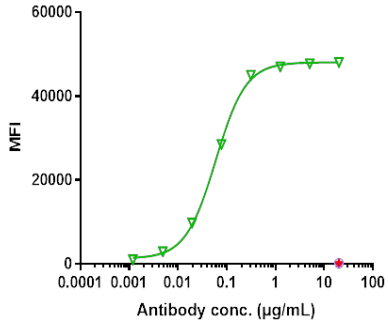

Anti-PDCD1 / PD-1 / CD279 Reference Antibody (spartalizumab) on SDS-PAGE under reducing (R) condition. The purity of the protein is greater than 95%.



The purity of Anti-PDCD1 / PD-1 / CD279 Reference Antibody (spartalizumab) is 100%, determined by SEC-HPLC.




Immobilized human PD-1 His at 2 ug/mL can bind Anti-PDCD1 / PD-1 / CD279 Reference Antibody (spartalizumab), EC50=0.01484 ug/mL.




Human PDCD1 / PD-1 / CD279 NF-AT Luci Jurkat Cell Line were stained with Anti-PDCD1 / PD-1 / CD279 Reference Antibody (spartalizumab) and negative control protein respectively, washed and then followed by PE and analyzed with FACS, The EC50 is 0.05953 ug/mL.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.