Datasheet for ABIN2181603

# PD-1 Protein (AA 25-167) (Fc Tag)

3 Images

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## Overview

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|---|---|
| Quantity: | 100 µg |
| Target: | PD-1 (PDCD1) |
| Protein Characteristics: | AA 25-167 |
| Origin: | Cynomolgus |
| Source: | HEK-293 Cells |
| Protein Type: | Recombinant |
| Biological Activity: | Active |
| Purification tag / Conjugate: | This PD-1 protein is labelled with Fc Tag. |

## Product Details

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| Sequence: | AA 25-167 |
| Characteristics: | This protein carries a human IgG1 Fc tag at the C-terminus. The protein has a calculated MW of 42.6 kDa. As a result of different glycosylation, the protein migrates as 55-66 kDa under reducing (R) condition, and 110-140 kDa under non-reducing (NR) condition (SDS-PAGE). |
| Purity: | >90 % as determined by SDS-PAGE. |
| Sterility: | 0.22 µm filtered |
| Endotoxin Level: | Less than 1.0 EU per µg by the LAL method. |

## Target Details

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| Target: | PD-1 (PDCD1) |

## Target Details

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| Alternative Name: | PD-1 (PDCD1 Products) |
| Background: | Programmed cell death protein 1 (PD-1) is also known as CD279 and PDCD1, is a type I membrane protein and is a member of the extended CD28/CTLA-4 family of T cell regulators. PDCD1 is expressed on the surface of activated T cells, B cells, macrophages, myeloid cells and a subset of thymocytes. PD-1 has two ligands, PD-L1 and PD-L2, which are members of the B7 family. PD-L1 is expressed on almost all murine tumor cell lines, including PA1 myeloma, P815 mastocytoma, and B16 melanoma upon treatment with IFN-γ. PD-L2 expression is more restricted and is expressed mainly by DCs and a few tumor lines. PD1 inhibits the T-cell proliferation and production of related cytokines including IL-1, IL-4, IL-10 and IFN-γ by suppressing the activation and transduction of PI3K/AKT pathway. In addition, coligation of PD1 inhibits BCR-mediating signal by dephosphorylating key signal transducer. In vitro, treatment of anti-CD3 stimulated T cells with PD-L1-Ig results in reduced T cell proliferation and IFN-γ secretion. Monoclonal antibodies targeting PD-1 that boost the immune system are being developed for the treatment of cancer. |
| Molecular Weight: | 42.6 kDa |
| UniProt: | B0LAJ3 |
| Pathways: | Cancer Immune Checkpoints |

## Application Details

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| Restrictions: | For Research Use only |

## Handling

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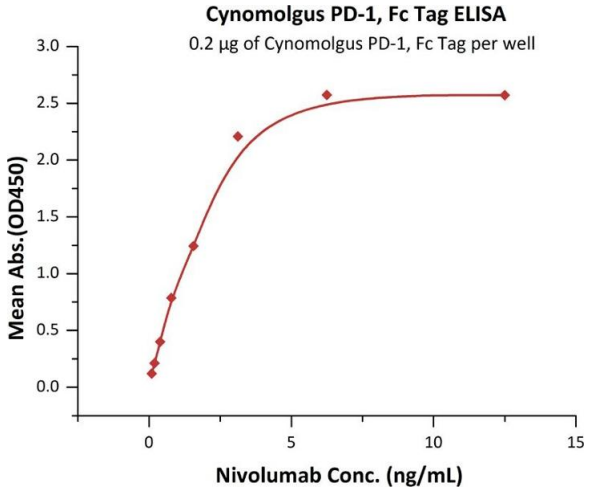
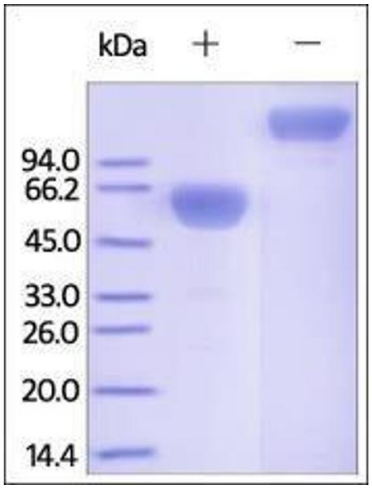
| Format: | Lyophilized |
| Buffer: | 50 mM Tris, 100 mM Glycine, pH 7.5 |
| Handling Advice: | Please avoid repeated freeze-thaw cycles. |
| Storage: | -20 °C |
| Storage Comment: | No activity loss was observed after storage at: In lyophilized state for 1 year (4 °C), After reconstitution under sterile conditions for 3 months (-70 °C). |



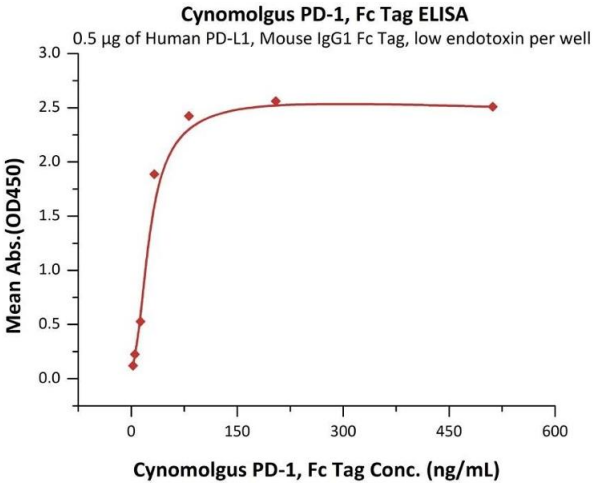

## ELISA

**Image 1.** Immobilized Cynomolgus PD-1, Fc Tag (ABIN2181604,ABIN2181603) at 2 μg/mL (100 μL/well) can bind Nivolumab with a linear range of 0.1-3 ng/mL (Routinely tested).




## SDS-PAGE

**Image 2.** Cynomolgus PD-1, Fc Tag on SDS-PAGE under reducing (R) and no-reducing (NR) conditions. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.




## ELISA

**Image 3.** Immobilized Human PD-L1, Mouse IgG1 Fc Tag, low endotoxin (Hied) (ABIN2870682,ABIN2870683) at 5 μg/mL (100 μL/well) can bind Cynomolgus PD-1, Fc Tag (ABIN2181604,ABIN2181603) with a linear range of 3-33 ng/mL (QC tested).