

#### **Datasheet**

# Anti-human PD-1

## **Humanized anti-human PD-1**

Product	Description	Catalogue-No.	Size
Anti-human PD-1	Lyophilized monoclonal antibody	CB-1120500	500 µg

## **Background Information**

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 Pl3K/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.

### Storage conditions and stability

Lyophilized PD-1 is stable at 2 - 8 °C for 24 months from production date.

The lyophilized PD-1 should be reconstituted in sterile distilled water to your desired concentration. Should be stored in working aliquots at -20°C when reconstituted.

### Composition

Sourced from CHO cells. Protein A purified from cell culture supernatant (Immunogen: human recombinant PD-1). Lyophilized from a 0.2 µm filtered solution in PBS with HSA

Purity: > 95.0%

Biological activity: reactive for human cells.

Recommended concentration: For ELISA, WB, IHC 1:2,000 – 1:5,000

Endotoxin Level: <2.0 EU/mg

## **Technical support**

For technical support, questions or remarks please contact your local PAN-Biotech partner or the technical department of PAN-Biotech via email (<a href="mailto:info@pan-biotech.com">info@pan-biotech.com</a>) or phone +49-8543-601630.