

## Anti-PD-1 [J43] Standard Size Ab01417-23.0

This chimeric rabbit antibody was made using the variable domain sequences of the original Hamster IgG format, for improved compatibility with existing reagents, assays and techniques.

**Isotype and Format:** Rabbit IgG, Lambda

Clone Number: J43

Alternative Name(s) of Target: CD279; PD1; PD 1; Programmed cell death protein 1; Programmed cell

death 1; pdcd1; Protein PD-1; mPD-1

**UniProt Accession Number of Target Protein:** Q02242

Published Application(s): depleting, IP, neutralising, ELISA, FC, IHC

**Published Species Reactivity: Mouse** 

Immunogen: This antibody was raised by immunising Armenian hamsters with B12 cells, a PD-1 cDNA

transfectant of BHK cells.

**Specificity:** This antibody is specific for murine PD-1.

**Application Notes:** The specificity of this antibody has been confirmed in ELISA analysis, using PD-1 extracellular domain fusion proteins (Agata et al, 1996). Additionally, in flow cytometric analysis, this antibody reacts with PD-1 cDNA-transfected BHK and CHO cells, but not with parental BHK and CHO cells, as well as reacting with lymphocytes from PD-1 cDNA transgenic mice (Agata et al, 1996). This antibody has been used to immunoprecipitate PD-1 from lysates of PD-1 cDNA-transfected BHK and CHO cells (Agata et al, 1996), in flow cytometric quantification of CD4+PD-1+ T cells in murine spleens (Kasagi et al, 2010), and in immunohistochemical analysis of acetone-fixed murine spinal cord and brain tissue sections (Salama et al, 2003). This antibody displays diverse effects in different mouse models of disease. When administered to NZB/W F1 mice, a model of lupus-like nephritis, this antibody has been shown to delay the onset of nephritis and prolong survival, through the depletion of PD-1+ T cells (Kasagi et al, 2010). Antibody-treated NZB/W F1 mice displayed decreased numbers of PD-1+ T cells, and this antibody was confirmed to trigger complement-dependent cytotoxicity in PD-1+ T cells in vitro (Kasagi et al, 2010). Conversely, administration to experimental allergic encephalitis (EAE) and NOD diabetes mice exacerbated disease, through its neutralising activity (Salama et al, 2003; Ansari et al, 2003); this antibody has been shown in vitro to inhibit binding of both PD-L1-Ig and PD-L2-Ig to PD-1 transfected BHK cells (Ansari et al, 2003).

**Antibody First Published in:** Agata et al. Expression of the PD-1 antigen on the surface of stimulated mouse T and B lymphocytes. Int Immunol. 1996 May;8(5):765-72.

## PMID:8671665

**Note on publication:** Describes the original generation of this antibody, and its use in ELISA, flow cytometry and immunoprecipitation analyses.

## **Product Form**

**Size:** 200 µg Purified antibody.

**Purification:** Protein A affinity purified **Supplied In:** PBS with 0.02% Proclin 300.

Storage Recommendation: Store at 4°C for up to 3 months. For longer storage, aliquot and store at -

20°C.

**Concentration:** 1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.