

## Anti-PD-1 [J43] VivopureX 25 mg Ab01417-2.3-VXX

This antibody was created using our proprietary Fc Silent™ engineered Fc domain containing key point mutations that abrogate binding to Fc gamma receptors.

This chimeric mouse 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:** Mouse IgG2a, [Fc Silent™](#), 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:** 25 mg VivopureX products are produced at high purity (>98%), low endotoxin (<0.5 EU/mg) and are formulated without preservatives. These antibodies are chimerized to have an Fc domain matching their target species to reduce immunogenicity and give you the optimal effector function for your experiment. As a result VivopureX products are the ideal choice for in vivo research applications.

**Purification:** Protein A affinity purified

**Supplied In:** PBS only.

**Storage Recommendation:** All VivopureX products are formulated in PBS only without addition of preservatives. To ensure optimal storage and prevent microbial contamination, only open and dispense under sterile conditions.

**Concentration:**  $\geq 1$ mg (see vial label for exact conc)

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