

## Anti-PD-1 [29F.1A12] VivopureX 1 mg Ab02816-2.3-VXS

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 Rat IgG2a format, for improved compatibility with existing reagents, assays and techniques.

**Isotype and Format:** Mouse IgG2a, Fc Silent™, Kappa

**Clone Number:** 29F.1A12

**Alternative Name(s) of Target:** CD279; Programmed cell death protein 1; Protein PD-1; mPD-1

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

**Published Application(s):** Blocking, IHC, WB, FC

**Published Species Reactivity:** Mouse

**Immunogen:** The antibody was raised by immunizing rats with plasmid DNA containing PD-1.

**Specificity:** This antibody recognizes an epitope on mouse PD-1.

**Application Notes:** This antibody was used for detection of PD-1 in CHO cells using flow cytometry. The ability of the antibody to block PD-1 interaction with PD-L1 or PD-L2 on CHO cells in an in vitro blocking assay was tested; the clone blocked PD-L1 Ig and PD-L2 Ig binding at high concentration, but only blocked 35% of PD-L1 Ig or PD-L2 Ig binding at 10 ug/ml. This antibody was also used for immunohistochemical studies of various mouse tissues, such as heart (Liang et al, 2003; pmid: 14515254). In vivo anti-tumor effect in terms of level of tumor growth reduction was studied, a significant tumor growth reduction was observed in the tumors from mice treated with the antibody (Tobias et al, 2020; pmid: 32528470). The antibody was used for the detection of PD-1 in EL4 cells using flow cytometry. The antibody was used for cross-blocking with the unconjugated version of the same clones and it was reported to prevent PD-1 from interacting with PD-L1 (Polesso et al, 2021; pmid: 33684223). The antibody was used as a positive control for CT26 tumor model, a murine model of colon cancer (Kaumaya et al.; pmid:33117602).

**Antibody First Published in:** Liang et al. Regulation of PD-1, PD-L1, and PD-L2 expression during normal and autoimmune response Eur. J. Immunol. 2003. 33: 2706-2716 [PMID:14515254](#)

**Note on publication:**

## Product Form

**Size:** 1 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. Store at 4°C for up to 3 months. For longer storage, aliquot and store at -20°C.

**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.