

## Anti-PD-1 [29F.1A12] Standard Size Ab02816-2.3

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<sup>™</sup>, 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 ey al.; pmid:33117602).

**Antibody First Published in:** Liang et al. Regulation of PD-1, PD-L1, and PD-L2 expressionduring normal and autoimmune response Eur. J. Immunol. 2003. 33: 2706–2716 PMID:14515254

Note on publication:

## **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.