

## Anti-PD-1 [JC053] Bulk Size Ab02247-3.3-BT

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

This reformatted mouse antibody was made using the variable domain sequences of the original Mouse IgA format, for improved compatibility with existing reagents, assays and techniques.

**Isotype and Format:** Mouse IgG2b, Fc Silent™, Kappa

**Clone Number:** JC053

**Alternative Name(s) of Target:** CD279; Programmed death 1 receptor; PD1; PD 1

**UniProt Accession Number of Target Protein:** A0A024FCJ9

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

**Published Species Reactivity:** Dog

**Immunogen:** The original antibody was generated by immunizing BALB/c mice with recombinant canine PD-1 using an exponentially increasing dosing strategy with MPLA as adjuvant.

**Specificity:** This antibody binds canine PD-1.

**Application Notes:** This antibody is recommended for detection of canine PD-1. This antibody can detect canine PD-1 in a western blot assay. JC053 successfully detected canine PD-1 expressed on formalin-fixed paraffin-embedded (FFPE) tonsil and lymph node via immunohistochemistry suggesting that this could be useful for histological detection of canine PD-1 and as diagnostic tool in tumor biopsies. JC053 was also used to determine the PD-1 expression on CD4+ and CD8+ T-cells of canine PBMCs stimulated with ConA using flow cytometry. It could also detect recombinant canine PD-1 expression on CHO and CLGL-90 cells in flow cytometry. The ability of the antibody to block interactions between PD-1 and PD-L1 was checked using ELISA. It is known that blockade of PD-L1 and PD-1 interactions causes increase in Ifn-γ level. This antibody did not effectively block PD-1 and did not cause a recovery of T cell function (PMID: 32614928).

**Antibody First Published in:** Choi et al. Development of canine PD-1/PD-L1 specific monoclonal antibodies and amplification of canine T cell function. PLoS One. (2020); 15(7): e0235518 [PMID:32614928](#)

**Note on publication:** Describes the generation and characterization of antibodies towards canine PD-1 and PD-L1 for their potential use in therapeutics for veterinary oncology.

## Product Form

**Size:**

1 mg Purified antibody in bulk size.

**Purification:** Protein A affinity purified

**Supplied In:** PBS only.

**Storage Recommendation:** Store at 4°C for up to 3 months. Note, this antibody is provided without added preservatives, it is therefore recommended this antibody be handled under sterile conditions. 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.