

## Anti-PD-1 [JC053] Bulk Size Ab02247-23.0-BT

This chimeric rabbit 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:** Rabbit IgG, 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- $\gamma$  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.