

Anti-PD-1 [JC053] Bulk Size Ab02247-201.1-BT

This chimeric dog 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: Dog IgG2 (IgG-B), 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.