

Anti-PD-L1 [JC071] Standard Size Ab02248-201.1

This chimeric dog antibody was made using the variable domain sequences of the original Mouse IgG1 format, for improved compatibility with existing reagents, assays and techniques.

Isotype and Format: Dog IgG2 (IgG-B), Kappa

Clone Number: JC071

Alternative Name(s) of Target: CD274; Programmed death ligand 1; PDL-1; PDL1

UniProt Accession Number of Target Protein: E2RKZ5

Published Application(s): FC, WB, ELISA, Block

Published Species Reactivity: Dog

Immunogen: The original antibody was generated by immunizing BALB/c mice with recombinant canine

PD-L1 using an exponentially increasing dosing strategy with MPLA as adjuvant.

Specificity: This antibody binds canine PD-L1.

Application Notes: This antibody is recommended for detection of canine PD-L1. This antibody successfully detected canine PD-L1 in a western blot assay. JC071 was used to determine the increased PD-1 expression on canine PBMCs stimulated with peptidoglycan or lipopolysaccharide using flow cytometry. JC071 was also able to detect recombinant PD-L1 expressed on DH82 cell line both with and without in vitro activation using IFN-γ in flow cytometry. It also recognized recombinant canine PD-L1 expressed on CHO 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. JC071 successfully blocked PD-L1 and amplified IFN-γ production in culture by approximately 6-fold. Thus, JC071 alleviated T-cell suppression and led to enhanced functional activity of T cells in culture and have potential application as an immunotherapy reagent for cancer treatment (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: 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.