

Anti-PD-L1 [B3] Bulk Size Ab00840-23.9-BT

This is a reformatted camelid VHH - rabbit IgG Fc fusion protein.

Isotype and Format: Rabbit IgG-Fc fusion, His-Tagged

Clone Number: B3

Alternative Name(s) of Target: CD274; B7 Homolog 1; Programmed Cell Death 1 Ligand 1; PDCD1 Ligand 1; LDCD1LG1; PDCD1L1; B7H1; PDL1; Programmed Death Ligand 1; B7-H1; B7-H

UniProt Accession Number of Target Protein: Q9EP7

Published Application(s): functional assay, in vivo, Block, ELISA, FC

Published Species Reactivity: Mouse

Immunogen: The original antibody was generated by immunizing alpaca with the purified ectodomain of mouse PD-L1.

Specificity: This antibody binds mouse PD-L1 and does not cross react with human PD-L1. This protein acts as a ligand for the inhibitory receptor PD-1, modulates the activation threshold of T-cells and limits T-cell effector response. It plays a critical role in induction and maintenance of immune tolerance to self.

Application Notes: This antibody could block the interaction between PD-L1 and PD-1 and was also reported to inhibit its binds with B7-1. In vitro competition experiments confirmed that B3 competes for binding with both PD-1 and the alternative ligand B7-1 (CD80) for PD-L1 binding. 18F-labeled antibody was used in vivo to study the expression of PD-L1 in brown adipose tissues using immuno PET-CT imaging (PMID: 28935898). This antibody was used for the identification of recombinant PD-L1 Fc fusion protein using ELISA. This antibody can recognize IFN-gamma inducible PD-L1 on multiple murine cancer cell lines (PMID: 18173375). This antibody augments in vitro cytotoxicity by OT-I cells against B16-OVA or by melanoma-specific TRP1 CD8 T cells cultured with B16 melanoma cells (PMID: 24459675). In vivo, it delays the growth of B16 melanoma cells after vaccination with GVAX. It binds pancreatic cancer cell lines Panc02 and KPC in vitro, and ex vivo on cells from resected orthotopic tumors (PMID: 29459478). A fusion protein B3-IL2 prepared using this antibody and when used in combination with anti-melanoma antibody TA99 it showed tumor growth and prolonged survival compared to treatment with TA99 and anti-PD-L1 alone (PMID: 29459478).

Antibody First Published in: Ingram et al. PD-L1 is an activation-independent marker of brown adipocytes. Nat Commun. 2017 Sep 21;8(1):647. [PMID:28935898](https://pubmed.ncbi.nlm.nih.gov/28935898/)

Note on publication: The study evaluates the expression of PD-L1 in brown adipose tissues (BAT) using a radiolabeled camelid single chain antibody and PET-CT imaging.

Product Form

Size: 1 mg Purified antibody in bulk size.

Purification: Purified by Immobilized Metal Affinity Chromatography

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.