



Rat Anti-Mouse PD-L1 (B7-H1) Monoclonal antibody, clone 10F.9G2 (CABT-L4404)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview

The 10F.9G2 monoclonal antibody reacts with mouse PD-L1 (programmed death ligand 1) also known as B7-H1 or CD274. PD-L1 is a 40 kDa type I transmembrane protein that belongs to the B7 family of the Ig superfamily.

Target	Mouse PD-L1 (B7-H1)
Immunogen	Mouse CD274
Isotype	IgG2b, κ
Source/Host	Rat
Species Reactivity	Mouse
Clone	10F.9G2
Purification	Protein G purified. Purity>95%. Determined by SDS-PAGE
Conjugate	Functional Grade
Applications	in vivo PD-L1 blockade, IF, IHC-F, FC, WB
Molecular Weight	150 kDa
Format	0.2 µM filtered liquid. Purified from tissue culture supernatant in an animal free facility
Concentration	Lot specific
Size	5 mg

Buffer	PBS, pH 6.5. Contains no stabilizers or preservatives. [low endotoxin azide-free]
	Endotoxin level: <2EU/mg (<0.002EU/µg). Determined by LAL gel clotting assay
	Related dilution buffer: CABT-LB02
Preservative	None
Storage	The antibody solution should be stored undiluted at 4°C, and protected from prolonged exposure to light. Do not freeze.
Ship	Wet ice

BACKGROUND

Introduction	The 10F.9G2 monoclonal antibody reacts with mouse PD-L1 (programmed death ligand 1) also known as B7-H1 or CD274. PD-L1 is a 40 kDa type I transmembrane protein that belongs to the B7 family of the Ig superfamily. PD-L1 is expressed on T lymphocytes, B lymphocytes, NK cells, dendritic cells, as well as IFN γ stimulated monocytes, epithelial cells and endothelial cells. PD-L1 binds to its receptor, PD-1, found on CD4 and CD8 thymocytes as well as activated T and B lymphocytes and myeloid cells. Engagement of PD-L1 with PD-1 leads to inhibition of TCR-mediated T cell proliferation and cytokine production. PD-L1 is thought to play an important role in tumor immune evasion. Induced PD-L1 expression is common in many tumors and results in increased resistance of tumor cells to CD8 T cell mediated lysis. In mouse models of melanoma, tumor growth can be transiently arrested via treatment with antibodies which block the interaction between PD-L1 and PD-1. The 10F.9G2 antibody has been shown to block the interaction between PD-L1 and PD-1 and between PD-L1 and B7-1 (CD80).
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Keywords	CD274;CD274 molecule;B7-H;B7H1;PDL1;PD-L1;PDCD1L1;PDCD1LG1;programmed cell death 1 ligand 1;B7 homolog 1;CD274 antigen;PDCD1 ligand 1;programmed death ligand 1;
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GENE INFORMATION

Official Symbol	CD274 molecule
Synonyms	CD274; CD274 molecule; B7-H; B7H1; PDL1; PD-L1; PDCD1L1; PDCD1LG1; programmed cell death 1 ligand 1; B7 homolog 1; CD274 antigen; PDCD1 ligand 1; programmed death ligand 1;
References	Grasselly, C., et al. (2018). "The Antitumor Activity of Combinations of Cytotoxic Chemotherapy and Immune Checkpoint Inhibitors Is Model-Dependent." <i>Front Immunol</i> 9: 2100. PubMed; Deng, L., et al. (2014). "Irradiation and anti-PD-L1 treatment synergistically promote antitumor immunity in mice." <i>J Clin Invest</i> 124(2): 687-695. PubMed; Dolina, J. S., et al. (2014). "Liver-primed CD8+ T cells suppress antiviral adaptive immunity through galectin-9-independent T-cell immunoglobulin and mucin 3 engagement of high-mobility group box 1 in mice." <i>Hepatology</i> 59(4): 1351-1365. PubMed; Rutigliano, J. A., et al. (2014). "Highly

pathological influenza A virus infection is associated with augmented expression of PD-1 by functionally compromised virus-specific CD8+ T cells." J Virol 88(3): 1636-1651. PubMed;Yang, X., et al. (2014). "Targeting the tumor microenvironment with interferon-beta bridges innate and adaptive immune responses." Cancer Cell 25(1): 37-48. PubMed
