



# 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

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

<b>Buffer</b>	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
<b>Preservative</b>	None
<b>Storage</b>	The antibody solution should be stored undiluted at 4°C, and protected from prolonged exposure to light. Do not freeze.
<b>Ship</b>	Wet ice

## BACKGROUND

<b>Introduction</b>	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 $\gamma$ 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).
<b>Keywords</b>	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;

## GENE INFORMATION

<b>Official Symbol</b>	CD274 molecule
<b>Synonyms</b>	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;
<b>References</b>	Grasselly, C., et al. (2018). "The Antitumor Activity of Combinations of Cytotoxic Chemotherapy and Immune Checkpoint Inhibitors Is Model-Dependent." Front Immunol 9: 2100. PubMed;Deng, L., et al. (2014). "Irradiation and anti-PD-L1 treatment synergistically promote antitumor immunity in mice." J Clin Invest 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." Hepatology 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

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