

## APC Anti-Mouse CD274 (PD-L1) Antibody

<b>Catalog Number:</b>	201311, 201312
<b>Size:</b>	25 tests, 100 tests
<b>Target Name:</b>	CD274, PD-L1, B7-H1
<b>Regulatory Status:</b>	RUO

### PRODUCT DETAILS

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<b>Clone:</b>	10F.9G2
<b>Application:</b>	Flow Cytometry
<b>Reactivity:</b>	Mouse
<b>Format:</b>	APC
<b>Isotype:</b>	Rat IgG2b
<b>Antibody Type:</b>	Monoclonal
<b>Formulation:</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA
<b>Protein Concentration:</b>	Supplied at a lot-specific concentration.
<b>Storage&amp;Handling:</b>	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.
<b>Recommended Usage:</b>	For flow cytometric staining, it is recommended to use 5 µL of this reagent per 0.5-1.0 million cells in a 100 µL volume. Optimal reagent performance should be determined by titration for each specific application. APC has an excitation max at 650 nm and an emission max at 660 nm.
<b>Excitation Laser:</b>	Red Laser (633 nm)
<b>Isotype Control:</b>	300307

### BACKGROUND INFORMATION

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PD-L1 (Programmed Death-Ligand 1), also known as CD274 or B7-H1, is a 40 kDa type I transmembrane protein belonging to the B7 family within the immunoglobulin receptor superfamily. The protein contains immunoglobulin V-like and C-like domains and is expressed by a wide range of hematopoietic and non-hematopoietic cells, including T cells, B cells, NK cells, dendritic cells, monocytes, endothelial cells, and various tumor cells. PD-L1 serves as a ligand for PD-1 (CD279) and plays a critical role in immune regulation by inhibiting T-cell activation, proliferation, and cytokine production upon engagement with PD-1. This interaction maintains immune homeostasis during infection or inflammation, preventing autoimmunity. However, in tumor microenvironments, PD-L1 expression enables immune evasion by suppressing cytotoxic T-cell function, contributing to tumor progression. PD-L1 expression is considered prognostic in several malignancies, including colon cancer and renal cell carcinoma. Alternative splicing results in multiple transcript variants. The PD-1/PD-L1 axis is a major target in cancer immunotherapy.

### PRODUCT DATA

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Mouse splenocytes stained with either APC Anti-Mouse PD-L1 clone 10F.9G2 (color-filled histogram) or an isotype control (gray histogram).