

## ARG11039 anti-CD274 / PD-L1 antibody [12B4]

Package: 100 µg  
Store at: -20°C

### Summary

Product Description	Mouse Monoclonal antibody [12B4] recognizes CD274 / PD-L1
Tested Reactivity	Hu
Tested Application	WB, sELISA
Specificity	Reactive with human programmed death ligand 1 (PD-L1).
Host	Mouse
Clonality	Monoclonal
Clone	12B4
Isotype	IgG1, kappa
Target Name	CD274 / PD-L1
Species	Human
Immunogen	Human cell expressed recombinant PD-L1 (Phe19-Arg238) with poly-histidine tag at C-terminus.
Conjugation	Un-conjugated
Alternate Names	Programmed cell death 1 ligand 1; B7-H1; B7H1; PDL1; PDCD1 ligand 1; B7 homolog 1; PD-L1; CD antigen CD274; PDCD1L1; B7-H; Programmed death ligand 1; PDCD1LG1

### Application Instructions

Application table	Application	Dilution
	WB	Assay-dependent
	sELISA	Assay-dependent
Application Note	sELISA: Recommended pairs (capture - detection): ARG11040 anti-CD274 / PD-L1 antibody [15G3] - ARG11039 anti-CD274 / PD-L1 antibody [12B4] * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

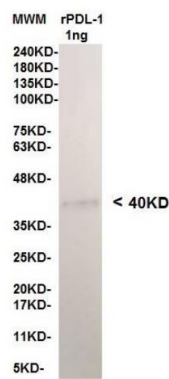
### Properties

Form	Liquid
Purification	Purification with Protein G.
Buffer	PBS (pH 7.0)
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Bioinformation

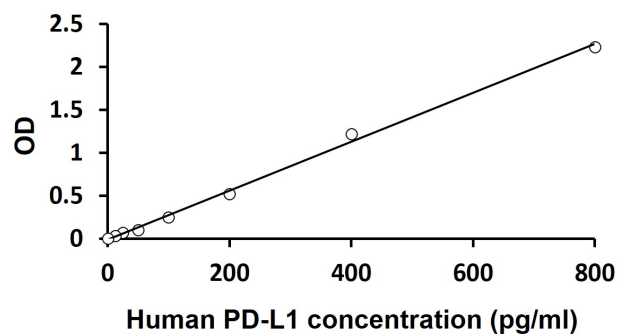
Gene Symbol	CD274
Gene Full Name	CD274 molecule
Background	<p>CD274 / PD-L1 is an immune inhibitory receptor ligand. It is expressed by hematopoietic and non-hematopoietic cells, such as T cells and B cells and various types of tumor cells. The encoded protein is a type I transmembrane protein that has immunoglobulin V-like and C-like domains. Interaction of this ligand with its receptor inhibits T-cell activation and cytokine production. During infection or inflammation of normal tissue, this interaction is important for preventing autoimmunity by maintaining homeostasis of the immune response. In tumor microenvironments, this interaction provides an immune escape for tumor cells through cytotoxic T-cell inactivation. Expression of this gene in tumor cells is considered to be prognostic in many types of human malignancies, including colon cancer and renal cell carcinoma. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Sep 2015]</p>
Function	<p>CD274 / PD-L1 plays a critical role in induction and maintenance of immune tolerance to self (PubMed:11015443, PubMed:28813417, PubMed:28813410). As a ligand for the inhibitory receptor PDCD1/PD-1, modulates the activation threshold of T-cells and limits T-cell effector response (PubMed:11015443, PubMed:28813417, PubMed:28813410). Through a yet unknown activating receptor, may costimulate T-cell subsets that predominantly produce interleukin-10 (IL10) (PubMed:10581077).</p> <p>The PDCD1-mediated inhibitory pathway is exploited by tumors to attenuate anti-tumor immunity and escape destruction by the immune system, thereby facilitating tumor survival (PubMed:28813417, PubMed:28813410). The interaction with PDCD1/PD-1 inhibits cytotoxic T lymphocytes (CTLs) effector function. The blockage of the PDCD1-mediated pathway results in the reversal of the exhausted T-cell phenotype and the normalization of the anti-tumor response, providing a rationale for cancer immunotherapy. [UniProt]</p>
Highlight	<p>Related products: <a href="#">PD-L1 antibodies</a>; <a href="#">PD-L1 ELISA Kits</a>; <a href="#">Anti-Mouse IgG secondary antibodies</a>;</p> <p>Related news: <a href="#">The best solution for PD-1/PD-L1 research</a> <a href="#">Examining CTL/NK-mediated cytotoxicity by ELISA</a></p>
Calculated Mw	33 kDa
Cellular Localization	Cell membrane and Endomembrane system.

Images



ARG11039 anti-CD274 / PD-L1 antibody [12B4] WB image

Western blot: 1 ng of recombinant Human PD-1 stained with ARG11039 anti-CD274 / PD-L1 antibody [12B4].



ARG11039 anti-CD274 / PD-L1 antibody [12B4] standard curve image

ARG11039 anti-CD274 / PD-L1 antibody [12B4] results of a typical standard run with optical density reading at 450 nm.