

ARG55930 anti-CD274 / PD-L1 antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes CD274 / PD-L1
Tested Reactivity	Hu, Ms
Predict Reactivity	Rat
Tested Application	FACS, ICC/IF, IHC-P, WB
Specificity	This antibody has no cross-reactivity to PD-L2.
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	CD274 / PD-L1
Immunogen	Synthetic peptide (17 aa) within aa. 60-110 of Human CD274 / PD-L1.
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
	FACS	0.5 µg/ml
	ICC/IF	20 µg/ml
	IHC-P	2.5 µg/ml
	WB	0.5 - 1 µg/ml
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	Raji cell lysate	

Properties

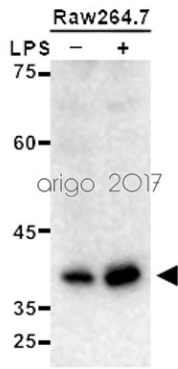
Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	PBS and 0.02% Sodium azide
Preservative	0.02% Sodium azide
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. 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.

Note For laboratory research only, not for drug, diagnostic or other use.

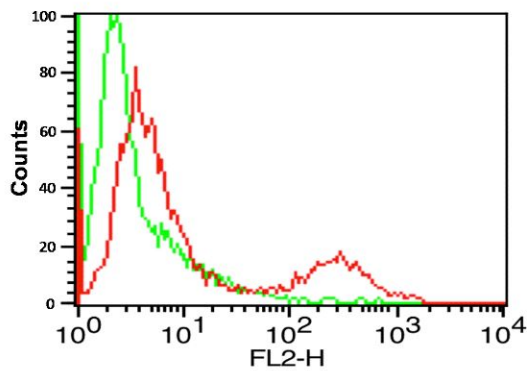
Bioinformation

Database links	GeneID: 29126 Human GeneID: 60533 Mouse Swiss-port # Q9EP73 Mouse Swiss-port # Q9NZQ7 Human
Gene Symbol	CD274
Gene Full Name	CD274 molecule
Background	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]
Function	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). 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]
Highlight	Related products: PD-L1 antibodies ; PD-L1 ELISA Kits ; Anti-Rabbit IgG secondary antibodies ; Related news: Why anti-PD-1/PD-L1 therapy doesn't work? The best solution for PD-1/PD-L1 research Examining CTL/NK-mediated cytotoxicity by ELISA
Calculated Mw	33 kDa
Cellular Localization	Cell membrane and Endomembrane system.



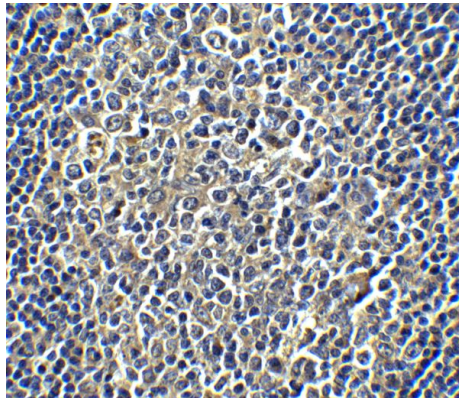
ARG55930 anti-CD274 / PD-L1 antibody WB image

Western blot: 20 µg of Raw264.7 cells untreated or treated with LPS. The blots were stained with ARG55930 anti-CD274 / PD-L1 antibody at 1:1000 dilution.



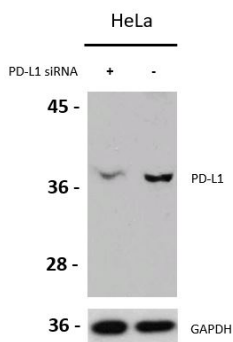
ARG55930 anti-CD274 / PD-L1 antibody FACS image

Flow Cytometry: A-20 cells stained with ARG55930 anti-CD274 / PD-L1 antibody at 0.5 µg/ml dilution (red); Isotype control (green).



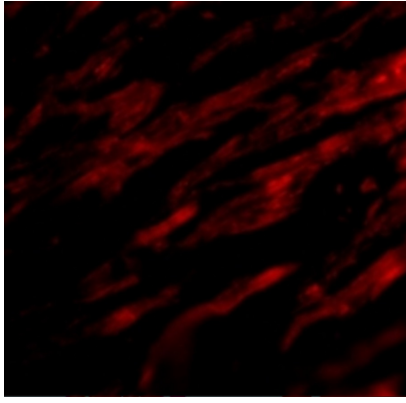
ARG55930 anti-CD274 / PD-L1 antibody IHC-P image

Immunohistochemistry: Human tonsil tissue stained with ARG55930 anti-CD274 / PD-L1 antibody at 5 µg/ml.



ARG55930 anti-CD274 / PD-L1 antibody WB image

Western blot: 10 µg of lysate from HeLa cell transfected with 1) siPD-L1 or 2) control siRNA stained with ARG55930 anti-CD274 / PD-L1 antibody at 1:500 dilution.



ARG55930 anti-CD274 / PD-L1 antibody IF image

Immunofluorescence: Human Heart cells stained with ARG55930 anti-CD274 / PD-L1 antibody at 20 µg/ml dilution.