ARG81930
Mouse CD274 / PD-L1 ELISA Kit

Package: 96 wells
Store at: 4°C

Component

Cat. No.	Component Name	Package	Temp
ARG81930-001	Antibody-coated microplate	8 X 12 strips	4°C. Unused strips should be sealed tightly in the air-tight pouch.
ARG81930-002	Standard	2 X 10 ng/vial	4°C
ARG81930-003	Standard/Sample diluent	30 ml (Ready to use)	4°C
ARG81930-004	Antibody conjugate concentrate (100X)	1 vial (100 µl)	4°C
ARG81930-005	Antibody diluent buffer	12 ml (Ready to use)	4°C
ARG81930-006	HRP-Streptavidin concentrate (100X)	1 vial (100 µl)	4°C
ARG81930-007	HRP-Streptavidin diluent buffer	12 ml (Ready to use)	4°C
ARG81930-008	25X Wash buffer	20 ml	4°C
ARG81930-009	TMB substrate	10 ml (Ready to use)	4°C (Protect from light)
ARG81930-010	STOP solution	10 ml (Ready to use)	4°C
ARG81930-011	Plate sealer	4 strips	Room temperature

Summary

Product Description	ARG81930 Mouse CD274 / PD-L1 ELISA Kit is an Enzyme Immunoassay kit for the quantification of Mouse CD274 / PD-L1 in serum, plasma (heparin, EDTA) and cell culture supernatants.
Tested Reactivity	Ms
Tested Application	ELISA
Specificity	There is no detectable cross-reactivity with other relevant proteins.
Target Name	CD274 / PD-L1
Conjugation	HRP
Conjugation Note	Substrate: TMB and read at 450 nm.
Sensitivity	15.6 pg/ml
Sample Type	Serum, plasma (heparin, EDTA) and cell culture supernatants.
Standard Range	31.2 - 2000 pg/ml
Sample Volume	100 µl

Precision	Intra-Assay CV: 6.7%; Inter-Assay CV: 7.5%
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

Assay Time	~ 5 hours

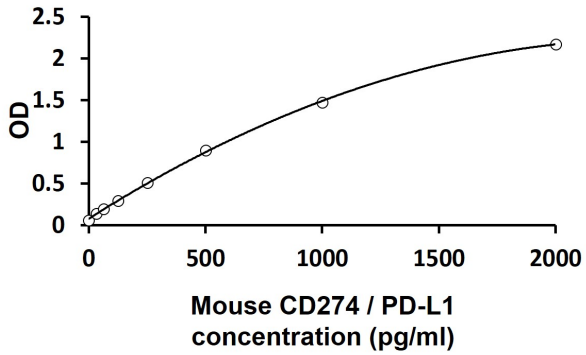
Properties

Form	96 well
Storage instruction	Store the kit at 2-8°C. Keep microplate wells sealed in a dry bag with desiccants. Do not expose test reagents to heat, sun or strong light during storage and usage. Please refer to the product user manual for detail temperatures of the components.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

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; Related news: Detecting exosomal PD-L1 secreted by cancer cells The best solution for PD-1/PD-L1 research Examining CTL/NK-mediated cytotoxicity by ELISA New ELISA data calculation tool: Simplify the ELISA analysis by GainData

Images



ARG81930 Mouse CD274 / PD-L1 ELISA Kit standard curve image

ARG81930 Mouse CD274 / PD-L1 ELISA Kit results of a typical standard run with optical density reading at 450 nm.