abcam

ab228413

Anti-PD-L1/CD274 antibody [28-8] - BSA and Azide free

Recombinant | RabMAb | Advanced Validation | KO Validated

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Carrier free	Yes
Clone number	28-8
Purification technique	Affinity purification Protein A
Concentration	1.009 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

mIHC

Tested

Species	Human
Dilution info	-

Notes	-

Not recommended

Species	Transfected cell line
Dilution info	-
Notes	-

IHC-P

Tested

Species	Human
Dilution info	-
Notes	For antigen buffer for FFPE tissue, it is recommended to use Universal HIER antigen retrieval reagent (ab208572).

Species	Transfected cell line
Dilution info	-
Notes	For antigen buffer for FFPE tissue, it is recommended to use Universal HIER antigen retrieval reagent (ab208572).

Flow Cyt

Tested

Species	Human
Dilution info	-
Notes	ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Not recommended

Species	Transfected cell line
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	-
Notes	ab228415 works better than ab205921 in western blot testing.

Not recommended

Species	Transfected cell line
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Transfected cell line
Dilution info	-
Notes	-

Expected

Species	Human
Dilution info	Use at an assay dependent concentration.
Notes	-

Target data

See full target information PD-L1/CD274

Function

Plays a critical role in induction and maintenance of immune tolerance to self (PubMed:11015443, PubMed:28813410, PubMed:28813417, PubMed:31399419). 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:28813410, PubMed:28813417, PubMed:36727298). Through a yet unknown activating receptor, may costimulate T-cell subsets that predominantly produce interleukin-10 (IL10) (PubMed:10581077). Can also act as a transcription coactivator: in response to hypoxia, translocates into the nucleus via its interaction with phosphorylated STAT3 and promotes transcription of GSDMC, leading to

pyroptosis (PubMed:32929201). 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:28813410, PubMed:28813417). The interaction with PDCD1/PD-1 inhibits cytotoxic T lymphocytes (CTLs) effector function (By similarity). 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 (By similarity).

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Storage information	Do Not Freeze

Notes

ab228413 is the carrier-free version of ab205921.

Additional information on positive controls:

Tissue:
Tonsil- with hyperreactive changes
Note: Tonsil Specimens- is recommended to screen several hyper-reactive tonsils to find those with highest expression of PD-L1 in crypt epithelium, macrophages homing the germinal centers and interfollicular mononuclear leukocytes.
Tumor tissues- prescreened for positive tumor and inflammatory infiltrates
Note: Tumor Specimens- PD-L1 expression varies by tumor type so screening is recommended to find positive and negative tumor controls. Refer to web link publication below to find some suggested tumor types. Many tumor specimens have some inflammatory macrophages and mononuclear leukocytes. Look for specimens with high numbers of these cells
Cell Lines: Positives: B-CPAP- high, ES-2- medium, HCC70 - low

For IHC on FFPE tissues, antigen retrieval buffer (ab208572) and **IHC detection kit HRP/DAB (ab209101)** is recommended.

For primary negative control, isotype control, **RabMAb negative control antibody (ab172730)** is recommended.

For negative control sample, use cell line COLO205, see ab95363.
For PD-L1 protein, see ab167713

Recommended protocols:
For IHC usage on FFPE tissues, the following antigen solution is recommended with clone 28-8 - Universal HIER antigen retrieval reagent (ab208572)

Western blot usage
For clone 28-8, it is recommended to use Odyssey system. This system has the advantages of a wider dynamic range and less background than chemiluminescence.

Anti-PD-L1 antibody [28-8] has been used as detector antibody in **Human PD-L1 SimpleStep ELISA® kit (ab214565)**.

Patented technology
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?
This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

Conjugation ready
Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with 1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

Compatibility
This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc.

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	PD-L1 also known as Programmed Death-Ligand 1 or CD274 is a protein involved in immune modulation. Mechanically PD-L1 interacts with its receptors particularly PD-1 to regulate cellular immune responses. This transmembrane protein has a calculated molecular weight of approximately 33 kDa. PD-L1 is expressed on various cell types including tumor cells and immune cells such as dendritic cells macrophages and B cells. Its expression is often upregulated in response to inflammatory cytokines.
Biological function summary	PD-L1 plays a central role in immune evasion mechanisms utilized by tumors. It is not part of a larger protein complex but directly interacts with PD-1 and CD80. When PD-L1 binds to PD-1 it sends inhibitory signals leading to decreased T cell activation and proliferation allowing cancer cells to avoid immune destruction. PD-L1 expression provides a mechanism for tumors to suppress immune surveillance facilitating tumor progression.
Pathways	

	PD-L1 is integral to the immune checkpoint pathway which is an important regulator of immune response. The interaction between PD-L1 and PD-1 provides a mechanism for immune tolerance which is part of the broader adaptive immune system pathway. PD-L1 is related to other immune checkpoint proteins such as CTLA-4 in its function to limit autoreactivity and promote immune homeostasis.
Associated diseases and disorders	PD-L1 is most associated with cancer particularly in tumors such as melanoma and non-small cell lung cancer. PD-L1 expression on tumor cells often correlates with poor prognosis. PD-L1 directly interacts with PD-1 in these cancers a target for immunotherapies such as checkpoint inhibitors which aim to block this interaction and restore immune activity against tumors. PD-L1 involvement extends to autoimmune disorders where altered expression can impact tolerance and lead to immune-related tissue damage.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

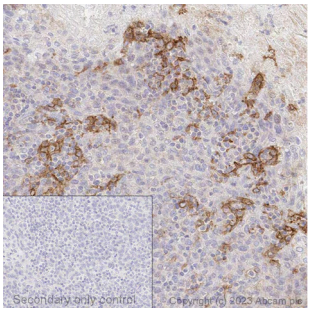
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

17 product images

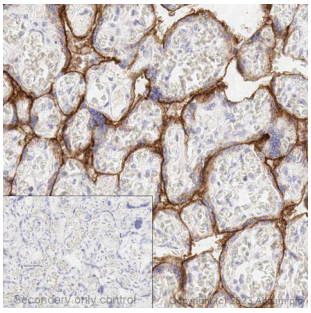


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PD-L1/CD274 antibody [28-8] - BSA and Azide free (ab228413)

PD-L1/CD274 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of human tonsil using rabbit Anti-PD-L1/CD274 antibody

Immunohistochemical analysis of formalin-fixed paraffin-embedded human tonsil labelling PD-L1 with ab205921 at a dilution of 2µg/ml. The immunostaining was performed on a Ventana DISCOVERY ULTRA (Roche Tissue Diagnostics) instrument with an OptiView DAB IHC Detection Kit. Heat mediated antigen retrieval was conducted for 32min with ULTRA cell conditioning solution (CC1 pH8.5). ab205921 anti PD-L1 antibody was incubated at 37°C for 16min. Sections were counterstained is with Hematoxylin II. Image inset shows absence of staining in secondary antibody only control.

This data was developed using ab205921, the same antibody clone in a different buffer formulation.

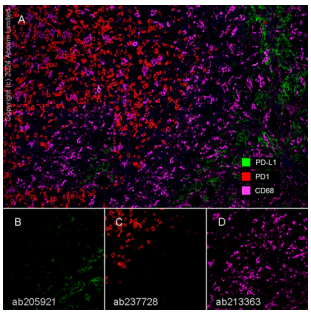


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PD-L1/CD274 antibody [28-8] - BSA and Azide free (ab228413)

PD-L1/CD274 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of human placenta using rabbit Anti-PD-L1/CD274 antibody

Immunohistochemical analysis of formalin-fixed paraffin-embedded human placenta labelling PD-L1 with ab205921 at a dilution of 2µg/ml. The immunostaining was performed on a Ventana DISCOVERY ULTRA (Roche Tissue Diagnostics) instrument with an OptiView DAB IHC Detection Kit. Heat mediated antigen retrieval was conducted for 32min with ULTRA cell conditioning solution (CC1 pH8.5). ab205921 anti PD-L1 antibody was incubated at 37°C for 16min. Sections were counterstained is with Hematoxylin II. Image inset shows absence of staining in secondary antibody only control.

This data was developed using ab205921, the same antibody clone in a different buffer formulation.



Multiplex immunohistochemistry - Anti-PD-L1/CD274 antibody [28-8] - BSA and Azide free (ab228413)

PD-L1/CD274 Multiplex immunohistochemistry staining of Human tonsil tissue using rabbit Anti-PD-L1/CD274 antibody

This data was developed using ab205921, the same antibody clone in a different buffer formulation.

Multiplex immunohistochemistry analysis of formalin/PFA-fixed paraffin-embedded Human tonsil tissue staining PD-L1 with ab205921 at a 1:500 (2.19 ug/ml) dilution; PD1 with ab237728 at 1:2000 (0.525 ug/ml) dilution and CD68 with ab213363 at 1:500 (1.26 ug/ml) dilution followed by a ready to use secondary antibody Opal Polymer HRP Ms + Rb.

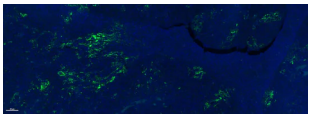
Panel A: merged staining of anti-CD68 (magenta; Opal™690), anti-PD-L1 (green; Opal™520) and anti-PD1 (red; Opal™570) on human tonsil.
Panel B: anti-PD-L1 stained on cells involved in T cell inhibition.

Panel C: anti-PD1 stained on antigen-stimulated T cells.
Panel D: anti-CD68 stained on macrophages.

The section was incubated in three rounds of staining: in the order of ab213363 and ab205921 for 30 mins, then ab237728 for 10 mins at room temperature. Each round was followed by a separate fluorescent tyramide signal amplification system.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument with an Opal™ 4-color kit. Image acquisition was performed with Leica SP8 confocal microscope.

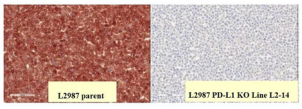
Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PD-L1/CD274 antibody [28-8] - BSA and Azide free (ab228413)

PD-L1/CD274 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-PD-L1/CD274 antibody

Anti-PD-L1 antibody [28-8] (ab205921)
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human tonsil tissue labelling PD-L1 with ab205921 at a dilution of 1:400. Heat mediated antigen retrieval was performed using AR9 antigen retrieval solution, and microwave treatment for 15 min at 20% power. Anti-Rabbit/Mouse HRP polymer (PerkinElmer Opal Polymer HRP Ms Plus Rb) was used as secondary antibody. Opal tyramide amplification was performed using Opal 520 fluorophore. Counterstained with DAPI stain. Image scanned with Vectra 3.0 and analyzed via Phenochart software.
This image was courteously provided by Dr. Houssein Abdul Sater, Georgia Cancer Center.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab205921).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PD-L1/CD274 antibody [28-8] - BSA and Azide free (ab228413)

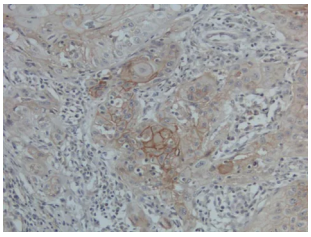
PD-L1/CD274 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-PD-L1/CD274 antibody

ab205921 specificity testing by Immunohistochemistry (KO testing): Loss of detection on KO Cells. Strong IHC detection with anti-PD-L1 (ab205921, clone 28-8) is seen in human lung adenocarcinoma tumor cell line L2987. PDL1 gene was edited in L2987 cells using TALEN constructs targeting exon4 of human PD-L1, transcript variant 1 (NM_014143.3) and complete knock out (K.O) confirmed by deep sequencing in clone L2-14. IHC detection is completely eliminated in the L2987 L2-14 K.O. cell line.

For recommended Immunohistochemistry (IHC) protocol, please refer to the protocol book in the Product Protocol section of ab205921.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab205921).

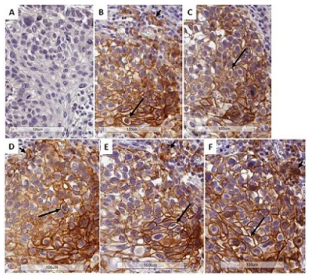


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PD-L1/CD274 antibody [28-8] - BSA and Azide free (ab228413)

PD-L1/CD274 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-PD-L1/CD274 antibody

Immunohistochemical analysis of formalin-fixed, paraffin-embedded Human head and neck squamous cell carcinoma tissue labeling PD-L1 with ab205921 at 2 µg/ml. Counterstained with Hematoxylin.
For antigen retrival buffer, Universal HIER antigen retrieval reagent (ab208572) was used.
For IHC detection kit, Rabbit specific IHC polymer detection kit HRP/DAB (ab209101) is recommended.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab205921).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PD-L1/CD274 antibody [28-8] - BSA and Azide free (ab228413)

PD-L1/CD274 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of human lung NSCLC using rabbit Anti-PD-L1/CD274 antibody

Immunohistochemical analysis of Human Lung NSCLC with ab205921 at 2 µg/ml.
High power view
A) Rabbit IgG 5 µg/mL. No staining
B) Anti PD-L1 2 µg/mL (ab205921 batches 1)
C) Anti PD-L1 2 µg/mL (ab205921 batches 3)
D) Anti PD-L1 2 µg/mL (ab205921 batches 4)
E) Anti PD-L1 2 µg/mL (ab205921 batches 5)
F) Anti PD-L1 2 µg/mL (ab205921 batches 6)

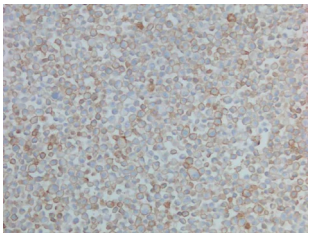
All batches/lots (13456) showed consistent results.

Note linear and complete or partial (arrows) PD-L1 staining of tumor cells. Tumor associated immune cells localized over the tumor margin exhibit positive plasma membrane staining (small arrows).

For recommended Immunohistochemistry (IHC) protocol please refer to the protocol book in the Product Protocol section.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab205921).

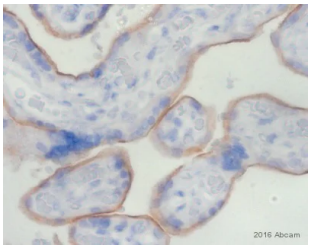


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PD-L1/CD274 antibody [28-8] - BSA and Azide free (ab228413)

PD-L1/CD274 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of L2987 cells using rabbit Anti-PD-L1/CD274 antibody

Immunohistochemical analysis of formalin-fixed paraffin-embedded L2987 (Human lung adenocarcinoma cell line with endogenous PD-L1 expression) cells labeling PD-L1 with ab205921 at 2 µg/ml. Counterstained with Hematoxylin.
For antigen retrival buffer Universal HIER antigen retrieval reagent (ab208572) was used.
For IHC detection kit Rabbit specific IHC polymer detection kit HRP/DAB (ab209101) is recommended.

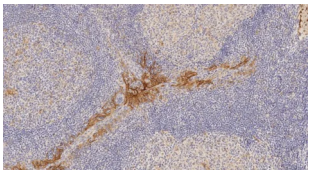
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab205921).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PD-L1/CD274 antibody [28-8] - BSA and Azide free (ab228413)

PD-L1/CD274 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of human placenta tissue using rabbit Anti-PD-L1/CD274 antibody

Paraformaldehyde-fixed paraffin-embedded human placenta tissue stained for PD-L1 using ab205921 at 1/100 dilution in immunohistochemical analysis.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab205921).



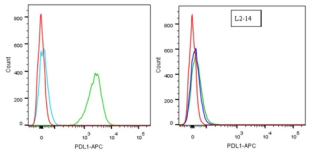
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PD-L1/CD274 antibody [28-8] - BSA and Azide free (ab228413)

PD-L1/CD274 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of human tonsil tissue using rabbit Anti-PD-L1/CD274 antibody

IHC image of ab205921 staining PD-L1 in human tonsil formalin fixed paraffin embedded tissue sections* performed on a Leica BOND RX (Polymer Refine kit). The section was pre-treated using heat mediated antigen retrieval with EDTA buffer (pH9 epitope retrieval solution 2) for 30 mins at 98°C. The section was then incubated with ab205921 5µg/ml working concentration for 60 mins at room temperature and detected using an HRP conjugated compact polymer system for 8 minutes at room temperature. DAB was used as the chromogen for 10 minutes at room temperature. The section was then counterstained with hematoxylin blued dehydrated cleared and mounted with DPX.
For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions primary antibody concentration and antibody incubation times.

*Tissue obtained from the Human Research Tissue Bank supported by the NIHR Cambridge Biomedical Research Centre

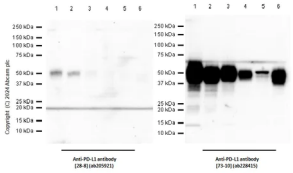
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab205921).



Flow Cytometry - Anti-PD-L1/CD274 antibody [28-8] - BSA and Azide free (ab228413)

PD-L1/CD274 Flow Cytometry staining of PDL-1 KO cells using rabbit Anti-PD-L1/CD274 antibody

ab205921 specificity testing by Flow Cytometry (KO testing): Loss of detection on KO cells.Strong detection with anti-PD-L1 (ab205921 clone 28-8) TALEN constructs targeting exon4 of human PD-L1 transcript variant 1 (NM_014143.3) and complete knock out (K.O) confirmed by deep sequencing in clone L2-14. Cell surface staining is almost completely eliminated in the L2987 L2-14 KO cell line. For recommended Flow Cytometry (Flow Cyt) protocol please refer to the protocol book in the protocol section. Alexa Fluor® 488 (ab209959) and Alexa Fluor® 647 (ab209960) conjugated versions are available for this clone. This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab205921).



Western blot - Anti-PD-L1/CD274 antibody [28-8] - BSA and Azide free (ab228413)

PD-L1/CD274 Western blot staining using rabbit Anti-PD-L1/CD274 antibody

ab228415 works better than ab205921 in western blot testing. Blocking/Diluting buffer and concentration: 5% NFDM/TBST This data was developed using ab205921, the same antibody clone in a different buffer formulation.
All lanes:
Western blot - Anti-PD-L1/CD274 antibody [28-8] (ab205921) at 1/1000 dilution

Lane 1:
MDA-MB-231(human breast adenocarcinoma epithelial cell) whole cell lysate at 20 µg

Lane 2:
U-87 MG (human glioblastoma astrocytoma epithelial cell) whole cell lysate at 20 µg

Lane 3:
PC-3 (human prostate adenocarcinoma epithelial cell) whole cell lysate at 20 µg

Lane 4:
A375 (human malignant melanoma epithelial cell) whole cell lysate at 20 µg

Lane 5:
HeLa (human cervix adenocarcinoma epithelial cell) whole cell lysate at 20 µg

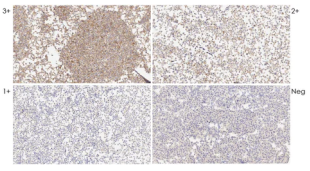
Lane 6:
A549 (human lung carcinoma epithelial cell) whole cell lysate at 20 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Observed band size: 40-60 kDa

Exposure time: 100s



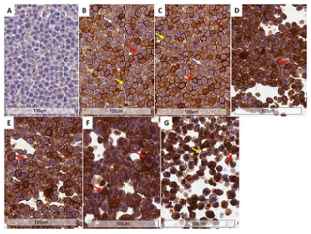
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PD-L1/CD274 antibody [28-8] - BSA and Azide free (ab228413)

PD-L1/CD274 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-PD-L1/CD274 antibody

IHC image of ab205921 staining PD-L1 in PD-L1 Dynamic Range Analyte Control formalin fixed paraffin embedded cell lines (HistoCyte Laboratories), performed on a Leica BOND RX (Polymer

Refine kit). The section was pre-treated using heat mediated antigen retrieval with EDTA buffer (pH9, epitope retrieval solution 2) for 30 mins at 98°C. The section was then incubated with ab205921, 5µg/ml working concentration, for 60 mins at room temperature and detected using an HRP conjugated compact polymer system for 8 minutes at room temperature. DAB was used as the chromogen for 10 minutes at room temperature. The section was then counterstained with hematoxylin, blued, dehydrated, cleared and mounted with DPX.
For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab205921).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PD-L1/CD274 antibody [28-8] - BSA and Azide free (ab228413)

PD-L1/CD274 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-PD-L1/CD274 antibody

Immunohistochemical analysis of CHO PD-L1 cells with ab205921 at 2 µg/ml.
High power view
A) Rabbit IgG, 5 µg/mL. No staining
B) Anti PD-L1, 2 µg/mL (ab205921 batches 1)
C) Anti PD-L1, 2 µg/mL (ab205921 batches 3)
D) Anti PD-L1, 2 µg/mL (ab205921 batches 4)
E) Anti PD-L1, 2 µg/mL (ab205921 batches 5)
F) Anti PD-L1, 2 µg/mL (ab205921 batches 6)
G) Anti PD-L1, 2 µg/mL (ab205921 batches 7)

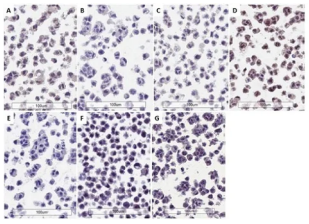
All batches/lots (1,3,4,5,6,7) showed consistent results.

Note strong, moderate, and weak (red, yellow, and white arrows respectively) plasma membrane staining of CHO PD-L1 transfected cells

For recommended Immunohistochemistry (IHC) protocol, please refer to the protocol book in the Product Protocol section.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab205921).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PD-L1/CD274 antibody [28-8] - BSA and Azide free (ab228413)

PD-L1/CD274 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of CHO cells using rabbit Anti-PD-L1/CD274 antibody

Immunohistochemical analysis of CHO Parental cells with ab205921 at 2 µg/ml.
High power view
A) Rabbit IgG 5 µg/mL. No staining
B) Anti PD-L1 2 µg/mL (ab205921 batches 1)
C) Anti PD-L1 2 µg/mL (ab205921 batches 3)

D) Anti PD-L1 2 µg/mL (ab205921 batches 4)
E) Anti PD-L1 2 µg/mL (ab205921 batches 5)
F) Anti PD-L1 2 µg/mL (ab205921 batches 6)
G) Anti PD-L1 2 µg/mL (ab205921 batches 7)

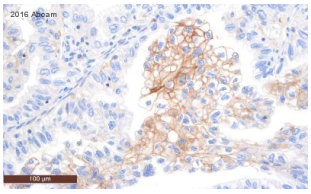
All batches/lots (134567) showed consistent results.

Note absence of PD-L1 expression in CHO parental cells.

For recommended Immunohistochemistry (IHC) protocol please refer to the protocol book in the Product Protocol section.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab205921).

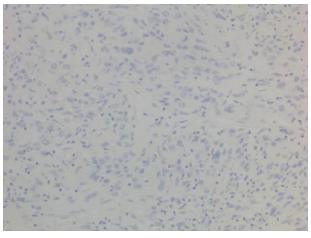


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PD-L1/CD274 antibody [28-8] - BSA and Azide free (ab228413)

PD-L1/CD274 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-PD-L1/CD274 antibody

Immunohistochemical staining of PD-L1 in formalin fixed, paraffin embedded human non-squamous non-small cell lung cancer (NSQ-NSCLC) using ab205921 at a dilution of 1/400, incubated for an hour at room temperature. Heat mediated antigen retrieval was carried out in low pH buffer and the sample was blocked with peroxidase blocking buffer for 3 minutes.
This image was courteously provided by Dr. Kai Schmitt from the Institute of Pathology, Saarbrücken-Rastpfuhl.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab205921).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PD-L1/CD274 antibody [28-8] - BSA and Azide free (ab228413)

PD-L1/CD274 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-PD-L1/CD274 antibody

Immunohistochemical analysis of formalin-fixed, paraffin-embedded PD-L1 negative Non-small cell lung carcinoma (NSCLC) tissue with ab205921 at 2 µg/ml. Counterstained with Hematoxylin. For antigen retrival buffer, Universal HIER antigen retrieval reagent (ab208572) was used.For IHC detection kit, Rabbit specific IHC polymer detection kit HRP/DAB (ab209101) is recommended.This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab205921).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.