abcam

ab256386

Anti-PD-L2/CD273 antibody [CAL28]

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.05% Sodium azide Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	CAL28
Purification technique	Affinity purification Protein A
Specificity	Although this clone performed well in IHC-P on tonsil tissue, non-specific nuclear staining was seen on TMA. The staining pattern did not correlate with ISH, so we cannot recommend this clone for IHC.
Concentration	0.528 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IP

Tested

Species	Human
Dilution info	1/30

Notes	-

WB

Tested

Species	Human
Dilution info	1/1000
Notes	-

IHC-P

Not recommended

Species	Human
Dilution info	-
Notes	Although this clone performed well in IHC-P on tonsil tissue, non-specific nuclear staining was seen on TMA. The staining pattern did not correlate with ISH, so we cannot recommend this clone for IHC. Both EDTA buffer pH9 and citrate buffer pH6 have been used successfully. Please refer to figure legends.

ICC/IF

Not recommended

Species	Human
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/500
Notes	-

Target data

See full target information PD-L2/CD273

Function	Plays a critical role in induction and maintenance of immune tolerance to self (PubMed:11224527, PubMed:12538684). Acts as a ligand for the inhibitory receptor PDCD1/PD-1, inhibiting T-cell proliferation by blocking cell cycle progression and cytokine production (PubMed:11224527).

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

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.

Supplementary info

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

Activity summary	PD-L2 also known as PDCD1LG2 or B7-DC is a member of the B7 protein family that plays a role in immune system regulation. This protein has a molecular mass of approximately 25 kDa. PD-L2 is expressed in antigen-presenting cells such as dendritic cells and macrophages. Expression is also located in some subsets of T cells and B cells. The PD-L2 can act as a second ligand for the PD-1 receptor which is important in immune checkpoints.
Biological function summary	PD-L2 offers protection to tissues from autoimmunity by regulating T-cell activation and fostering tolerance. By engaging with its receptor PD-1 PD-L2 forms a complex that modulates the immune response to prevent overactivation. This interaction limits the immune system's potential damage to healthy tissues maintaining proper immune function in diverse environments.
Pathways	PD-L2 participates in the immune checkpoint pathways where it works closely with PD-1 to mediate immune responses. PD-L2 forms an important part of the program death-1 (PD-1) pathway which plays a prominent role in downregulating T-cell activity. It relates to proteins such as PD-L1 which also interacts with PD-1 modulating immune tolerance and response to infections or tumors.
Associated diseases and disorders	PD-L2 involvement has been significant in cancer immunology and autoimmune conditions. Its interaction with PD-1 relates to the suppression of immune responses in tumors contributing to cancer progression. PD-L2's function as an immune checkpoint ligand associates with autoimmune diseases like rheumatoid arthritis where immune regulation goes awry. Both PD-1 and PD-L2 represent potential targets for therapeutic interventions due to their roles in these conditions.

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

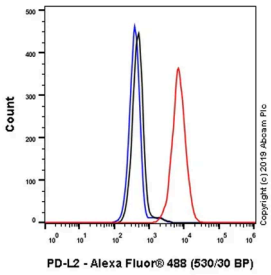
We do not recommend this combination. It is not covered by our product promise.

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.

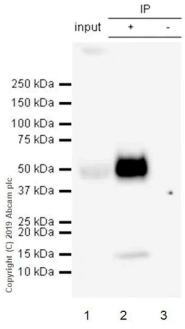
4 product images



Flow Cytometry (Intracellular) - Anti-PD-L2/CD273 antibody [CAL28] (ab256386)

PD-L2/CD273 Flow Cytometry (Intracellular) staining using rabbit Anti-PD-L2/CD273 antibody

Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed, 90% methanol-permeabilized HDLM-2 (human Hodgkin lymphoma) cells labeling PD-L2 with ab256386 at 1/500 dilution (Red) compared with a Rabbit monoclonal IgG Isotype control (ab172730) (Black) and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077), at 1/2000 dilution was used as the secondary antibody.



Immunoprecipitation - Anti-PD-L2/CD273 antibody [CAL28] (ab256386)

PD-L2 was immunoprecipitated from 0.35 mg of HDLM-2 (human Hodgkin lymphoma) whole cell lysate with ab256386 at 1/30 dilution. Western blot was performed from the immunoprecipitate using ab256386X at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (ab131366), was used as secondary antibody at 1/5000 dilution.

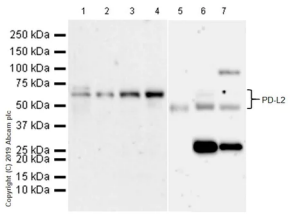
Lane 1: HDLM-2 whole cell lysate 10 µ (Input).
Lane 2: ab256386 IP in HDML-2 whole cell lysate.
Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab256386 in HDML-2 whole cell lysate.

Blocking and dilution buffer and concentration: 5% NFDM/TBST.
Exposure time: 5 seconds.

All lanes:
Immunoprecipitation - Anti-PD-L2/CD273 antibody [CAL28] (ab256386)

Predicted band size: 31 kDa

Observed band size: 45-60 kDa



Western blot - Anti-PD-L2/CD273 antibody [CAL28] (ab256386)

PD-L2/CD273 Western blot staining using rabbit Anti-PD-L2/CD273 antibody

Blocking and dilution buffer: 5% NFDM/TBST.
Exposure time: 3 minutes.

All lanes:
Western blot - Anti-PD-L2/CD273 antibody [CAL28] (ab256386) at 1/1000 dilution

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

Lane 2:

U-2 OS (human bone osteosarcoma epithelial cell line) whole cell lysate at 20 µg

Lane 3:
MG-63 (human osteosarcoma fibroblast) whole cell lysate at 20 µg

Lane 4:
Saos-2 (human osteosarcoma cell line) whole cell lysate at 20 µg

Lane 5:
Human tonsil lysate at 20 µg

Lane 6:
Human lung lysate at 20 µg

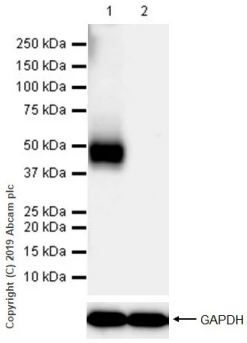
Lane 7:
Human lung cancer lysate at 20 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Predicted band size: 31 kDa

Observed band size: 45-60 kDa



Western blot - Anti-PD-L2/CD273 antibody [CAL28] (ab256386)

PD-L2/CD273 Western blot staining using rabbit Anti-PD-L2/CD273 antibody

Blocking and dilution buffer: 5% NFDM/TBST.
Exposure time: 10 seconds.

Negative control: Jurkat. (PMID: 27631416).

All lanes:
Western blot - Anti-PD-L2/CD273 antibody [CAL28] (ab256386) at 1/1000 dilution

Lane 1:
HDLM-2 (human Hodgkin lymphoma) whole cell lysate at 20 µg

Lane 2:
Jurkat (human T cell leukemia cell line from peripheral blood) whole cell lysate at 20 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Predicted band size: 31 kDa

Observed band size: 45-60 kDa

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