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PD-L1 Polyclonal Antibody

Catalog Number **PA5-28115**

Product data sheet

Details	
Size	100 µL
Host/Isotope	Rabbit / IgG
Class	Polyclonal
Type	Antibody
Immunogen	Synthetic peptide corresponding to a region within amino acids 230 and 290 of CD274
Conjugate	Unconjugated
Form	Liquid
Concentration	0.97 mg/mL
Purification	Antigen affinity chromatography
Storage buffer	PBS, pH 7, with 20% glycerol
Contains	0.025% ProClin 300
Storage Conditions	Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

Species Reactivity	
Species reactivity	Human
Published species	Human, Not Applicable

Tested Applications	Dilution *
Immunohistochemistry (Frozen) (IHC (F))	Assay-dependent
Immunohistochemistry (Paraffin) (IHC (P))	1:100-1:1,000
Western Blot (WB)	1:500-1:3,000
Immunocytochemistry (ICC/IF)	1:100-1:1,000

Published Applications	
Western Blot (WB)	See 3 publications below
Immunohistochemistry (IHC)	See 3 publications below
Flow Cytometry (Flow)	See 1 publications below

* Suggested working dilutions are given as a guide only. It is recommended that the user titrate the product for use in their own experiment using appropriate negative and positive controls.

Product specific information

Recommended positive controls: A431, MDA-MB-231, MDA-MB-231 (24 µg/mL Tunicamycin treatment for 16 hr), MDA-MB-231, A549 (100 ng/mL IFN-gamma treatment for 48 hr), A431 (100 ng/mL IFN-gamma treatment for 48 hr). Store product as a concentrated solution. Centrifuge briefly prior to opening the vial.

Background/Target Information

Programmed death receptor ligand 1 (PD-L1, also called B7-H1) is a recently described B7 family member. To date, one specific receptor has been identified that can be ligated by PD-L1. This receptor, programmed death receptor 1 (PD-1), has been shown to negatively regulate T-cell receptor (TCR) signaling. Upon ligating its receptor, PD-L1 has been reported to decrease TCR-mediated proliferation and cytokine production. PD-L1 expression was found to be abundant on many murine and human cancers and could be further up-regulated upon IFN-gamma stimulation. Thus, PD-L1 might play an important role in tumor immune evasion.

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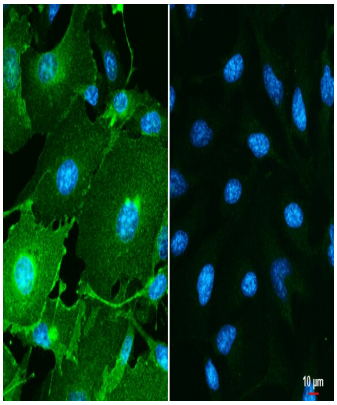
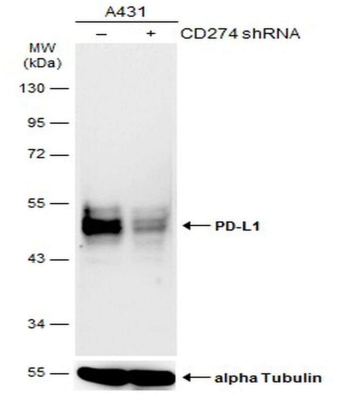
Product Images For PD-L1 Polyclonal Antibody



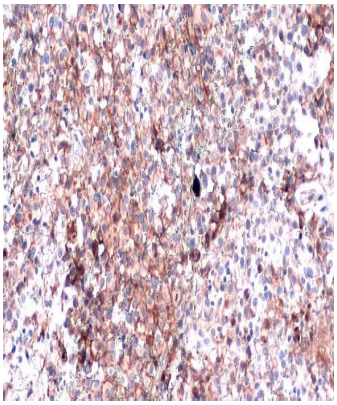
PD-L1 Antibody (PA5-28115) in ICC/IF

Immunocytochemistry-Immunofluorescence analysis of PD-L1 was performed in MDA-MB-231 (left) and HeLa (right) cells fixed in ice-cold MeOH for 5 min. Green: PD-L1 Polyclonal Antibody (Product # PA5-28115) diluted at 1:500. Blue: Hoechst 33342 staining. Scale bar = 10 µm.



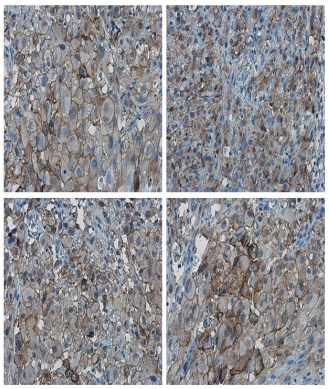
PD-L1 Antibody (PA5-28115)

Antibody specificity was demonstrated by shRNA mediated knockdown of the target protein. A431 cells were transfected with PD-L1 shRNA and decrease in signal intensity was observed in western blot application using PD-L1 antibody (Product # PA5-28115). {KD}



PD-L1 Antibody (PA5-28115) in IHC (P)

PD-L1 Polyclonal Antibody detects PD-L1 protein at cell membrane by immunohistochemical analysis. Sample: Paraffin-embedded human ovarian cancer. PD-L1 stained by PD-L1 Polyclonal Antibody (Product # PA5-28115) diluted at 1:4,000. Antigen Retrieval: Citrate buffer, pH 6.0, 15 min.



PD-L1 Antibody (PA5-28115) in IHC (P)

Immunohistochemistry (Paraffin) analysis of PD-L1 was performed in paraffin-embedded human ovarian carcinoma tissue using PD-L1 Polyclonal Antibody (Product # PA5-28115) at a dilution of 1:1000.

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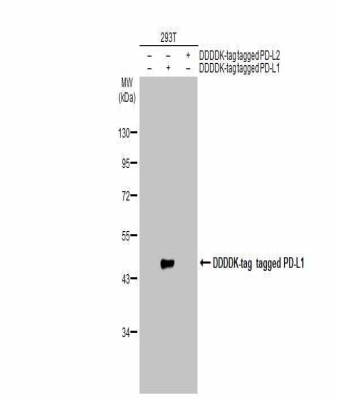
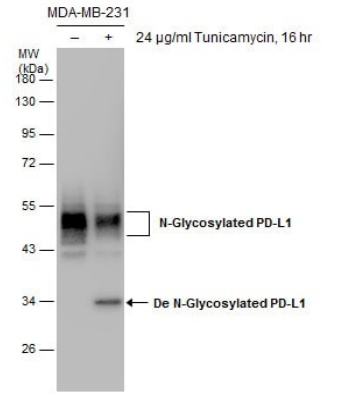


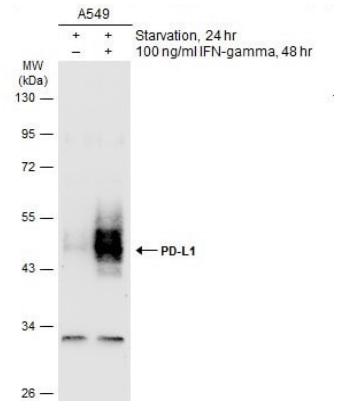
PD-L1 Antibody (PA5-28115) in WB

Western Blot analysis of PD-L1 was performed by separating 30 µg of non-transfected (–) and transfected (+) 293T whole cell extracts by 10% SDS-PAGE. Proteins were transferred to a membrane and probed with a PD-L1 Polyclonal Antibody (Product # PA5-28115) at a dilution of 1:1000. The HRP-conjugated anti-rabbit IgG antibody was used to detect the primary antibody., and the signal was developed with Trident ECL plus-Enhanced



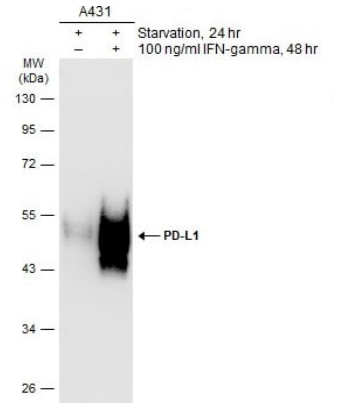
PD-L1 Antibody (PA5-28115) in WB

Western Blot analysis of PD-L1 was performed by separating 30 µg of untreated (–) and treated (+) MDA-MB-231 whole cell extracts by 10% SDS-PAGE. Proteins were transferred to a membrane and probed with a PD-L1 Polyclonal Antibody (Product # PA5-28115) at a dilution of 1:1000.



PD-L1 Antibody (PA5-28115) in WB

Western Blot analysis of PD-L1 was performed by separating 30 µg of untreated (–) and treated (+) A549 whole cell extracts by 10% SDS-PAGE. Proteins were transferred to a membrane and probed with a PD-L1 Polyclonal Antibody (Product # PA5-28115) at a dilution of 1:500.



PD-L1 Antibody (PA5-28115) in WB

Western Blot analysis of PD-L1 was performed by separating 30 µg of untreated (–) and treated (+) A431 whole cell extracts by 10% SDS-PAGE. Proteins were transferred to a membrane and probed with a PD-L1 Polyclonal Antibody (Product # PA5-28115) at a dilution of 1:500.

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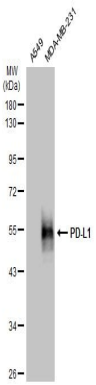
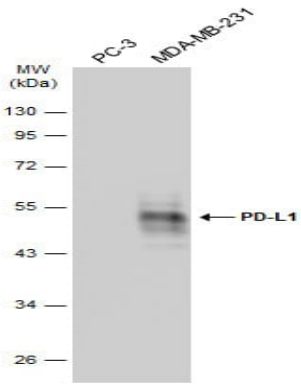


PD-L1 Antibody (PA5-28115) in WB

Western Blot using PD-L1 Polyclonal Antibody (Product # PA5-28115). Various whole cell extracts (30 µg) were separated by 10% SDS-PAGE, and the membrane was blotted with PD-L1 Polyclonal Antibody (Product # PA5-28115) diluted at 1:2,000. The HRP-conjugated anti-rabbit IgG antibody was used to detect the primary antibody.



PD-L1 Antibody (PA5-28115) in WB

Western Blot analysis of PD-L1 was performed by separating 30 µg of various whole cell extracts by 10% SDS-PAGE. Proteins were transferred to a membrane and probed with a PD-L1 Polyclonal Antibody (Product # PA5-28115) at a dilution of 1:2000 and a HRP-conjugated anti-rabbit IgG secondary antibody.

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PubMed References For PD-L1 Polyclonal Antibody

3 Western Blot References

Species / Dilution	Summary
Human / 1:1000	PA5-28115 was used in Western Blotting to investigate the interaction between the HDAC6 inhibitor, A452, and immunomodulatory drugs on dexamethasone-sensitive and -resistant multiple myeloma cells compared with the current clinically tested HDAC6 inhibitor, ACY-1215. International journal of oncology (2019; 55: 499) **"HDAC6selective inhibitor synergistically enhances the anticancer activity of immunomodulatory drugs in multiple myeloma."** Author(s):Won HR,Lee DH,Yeon SK,Ryu HW,Kim GW,Kwon SH PubMed Article URL:http://dx.doi.org/10.3892/ijo.2019.4828
Human / Not Cited	PA5-28115 was used in Western Blotting to establish MLLT6 as a regulator of oncogenic and interferon--associated immune resistance. EMBO reports (2020; 21:) **"MLLT6 maintains PD-L1 expression and mediates tumor immune resistance."** Author(s):Sreevalsan S,Döring M,Paszkowski-Rogacz M,Brux M,Blanck C,Meyer M,Momburg F,Buchholz F,Theis M PubMed Article URL:http://dx.doi.org/10.15252/embr.202050155
Human / 1:1000	PA5-28115 was used in Western Blotting to suggest that a therapeutic strategy that combines ACY-1215 and oxaliplatin warrants attention for the treatment of solid tumors, including CRC. International journal of oncology (2018; 53: 844) **"The HDAC6 inhibitor ACY1215 enhances the anticancer activity of oxaliplatin in colorectal cancer cells."** Author(s):Lee DH,Won HR,Ryu HW,Han JM,Kwon SH PubMed Article URL:http://dx.doi.org/10.3892/ijo.2018.4405

3 Immunohistochemistry References

Species / Dilution	Summary
Human / 1:7500	PA5-28115 was used in Immunohistochemistry to identify if CD4+ and CD8+ T cells are potential culprits of checkpoint inhibitor-associated immune encephalitis. Nature medicine (2019; 25: 1243) **"A case report of clonal EBV-like memory CD4⁺ T cell activation in fatal checkpoint inhibitor-induced encephalitis."** Author(s):Johnson DB,McDonnell WJ,Gonzalez-Ericsson PI,Al-Rohil RN,Mobley BC,Salem JE,Wang DY,Sanchez V,Wang Y,Chastain CA,Barker K,Liang Y,Warren S,Beechem JM,Menzies AM,Tio M,Long GV,Cohen JV,Guidon AC,O'Hare M,Chandra S,Chowdhary A,Lebrun-Vignes B,Goldinger SM,Rushing EJ,Buchbinder EI,Mallal SA,Shi C,Xu Y,Moslehi JJ,Sanders ME,Sosman JA,Balko JM PubMed Article URL:http://dx.doi.org/10.1038/s41591-019-0523-2
Human / Not Cited	PA5-28115 was used in Immunohistochemistry to report a case of acute lung injury in a lung cancer patient initially treated for ICI-pneumonitis and later found to have concurrent SARS-CoV-2 infection. medRxiv : the preprint server for health sciences (2020; :) **"Rapidly fatal pneumonitis from immunotherapy and concurrent SARS-CoV-2 infection in a patient with newly diagnosed lung cancer."** Author(s):Lovly CM,Boyd KL,Gonzalez-Ericsson PI,Lowe CL,Brown HM,Hoffman RD,Sterling BC,Kapp ME,Johnson DB,Kopparapu PR,Iams WT,Warren MA,Noto MJ,Rini BI,Jagasia M,Das SR,Balko JM PubMed Article URL:http://dx.doi.org/10.1101/2020.04.29.20085738
Human / 1:100	PA5-28115 was used in Immunohistochemistry to conclude that PD-L1, CD8, and CD20 are considered as early predictor and tracking markers for breast cancer. Heliyon (2022; 8:) **"Evaluation PD-L1, CD8 and CD20 as early predictor and tracking markers for breast cancer (BC) in Egypt."** Author(s):Hamed MM,Gouida MS,Abd El-Aziz SR,El-Sokkary AMA PubMed Article URL:http://dx.doi.org/10.1016/j.heliyon.2022.e09474

1 Flow Cytometry References

Species / Dilution	Summary
Human / 1:100	PA5-28115 was used in Flow cytometry/Cell sorting to develop a novel protocol combining two platforms (IsoFluxTM and ImageStream®X) to improve circulating tumour cells evaluation. Cancers (2021; 13:) **"Deep Phenotypic Characterisation of CTCs by Combination of Microfluidic Isolation (IsoFlux) and Imaging Flow Cytometry (ImageStream)."** Author(s):Ruiz-Rodríguez AJ,Molina-Vallejo MP,Aznar-Peralta I,González Puga C,Cañas García I,González E,Lorente JA,Serrano MJ,Garrido-Navas MC PubMed Article URL:http://dx.doi.org/10.3390/cancers13246386

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