Anti-PD-L1 Antibody [JJ08-95]

ET1701-41

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human
Applications:	WB, IHC-P
Molecular Wt:	Predicted band size: 33 kDa
Clone number:	JJ08-95

Description: Engagement of CD28 by B7-1 (CD80) or B7-2 (CD86) in the presence of antigen promotes T cell proliferation, cytokine production, differentiation of effector T cells, and the induction of Bcl-x, a promoter of T cell survival. Conversely, engagement of CTLA4 by B7-1 or B7-2 may inhibit proliferation and IL-2 production. Pdcd-1L1 (programmed cell death ligand-1), also known as B7-H1 or PD-L1, is 290 amino acid type I transmembrane protein which is 20% and 15% identical to B7-1 and B7-2, respectively. Pdcd-1L2 has immunoglobulin V-like and C-like domains and a 30 amino acid cytoplasmic tail. It does not bind CD28, cytotoxic T-lymphocyte A4 or ICOS (inducible co-stimulator). IL-2, although produced in small amounts, is required for the effect of Pdcd-1L1 co-stimulation. The gene which encodes Pdcd-1L1 maps to human chromosome 9p24. Pdcd-1L2 (programmed cell death ligand-2) is a 73 amino acid protein which contains a signal sequence, IgV- and IgC-like domains, a transmembrane region and a cytoplasmic region. The gene which encodes Pdcd-1L2 maps to human chromosome 9p24.2. The constitutive expression of Pdcd-1L1 and Pdcd-1L2 on paren-chymal cells of heart, lung and kidney suggests that the Pdcd-1-Pdcd-L system could provide unique negative signaling to help prevent autoimmune disease.

Immunogen: Synthetic peptide within Human PD-L1 aa 191-240 / 290.

Positive control: MDA-MB-231 cell lysate, A375 cell lysate, U-87 MG cell lysate, THP-1 cell lysate, human non-small cell lung cancer tissue.

Subcellular location: Cell membrane, Early endosome membrane, Recycling endosome membrane, Nucleus.

Database links: SwissProt: Q9NZQ7 Human

Recommended Dilutions:

WB	1:5,000
IHC-P	1:50-1:200

Storage Buffer: 1*TBS (pH7.4), 0.05% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Shipped at 4℃. Store at +4℃ short term (1-2 weeks). It is recommended to aliquot into single-use upon delivery. Store at -20℃ long term.

Purity: Protein A affinity purified.

Images

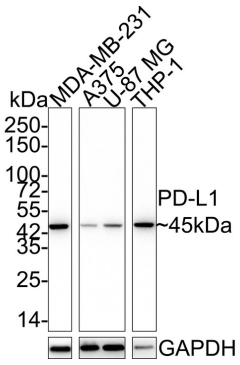

Fig1: Western blot analysis of PD-L1 on different lysates with Rabbit anti-PD-L1 antibody (ET1701-41) at 1/5,000 dilution.

Lane 1: MDA-MB-231 cell lysate
Lane 2: A375 cell lysate
Lane 3: U-87 MG cell lysate
Lane 4: THP-1 cell lysate

Lysates/proteins at 20 µg/Lane.

Predicted band size: 33 kDa
Observed band size: 45 kDa

Exposure time: 3 minutes 10 seconds;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (ET1701-41) at 1/5,000 dilution was used in 5% NFDM/TBST at 4℃ overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1:50,000 dilution was used for 1 hour at room temperature.

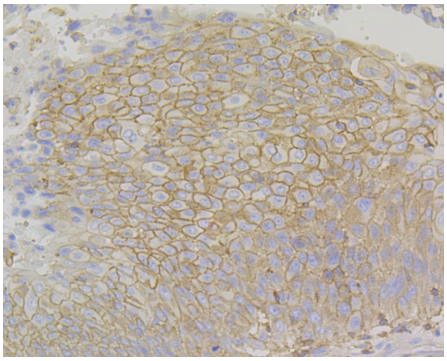

Fig2: Immunohistochemical analysis of paraffin-embedded human non-small cell lung cancer tissue using anti-PD-L1 antibody. The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 8.0-8.4) for 20 minutes.The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (ET1701-41, 1/200) for 30 minutes at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

Background References

1. Jurado J.O., et al. 2008. Programmed death (PD)-1:PD-ligand 1/PD-ligand 2 pathway inhibits T cell effector functions during human tuberculosis. J. Immunol. 181:116-125.
2. Boorjian S.A., et al. 2008. T-cell coregulatory molecule expression in urothelial cell carcinoma: clinicopathologic correlations and association with survival. Clin. Cancer Res. 14:4800-4808.