Anti-PD-L1 Antibody [PSH13-23]

HA723510

Product Type:	Recombinant Rabbit multiclonal IgG, primary antibodies
Species reactivity:	Human, Mouse
Applications:	WB
Molecular Wt:	Predicted band size: 33 kDa
Clone number:	PSH13-23

Description: PD-L1 (programmed-death ligand 1; CD274), is a transmembrane protein constitutionally expressed on a variety of cell types, including antigen presenting cells (dendritic cells and histiocytes) and some non-lymphoid tissues (heart and lung). Binding of PD-L1 to PD-1 (programmed-death 1; CD279) expressed by activated T-cells, inhibits their function, causing negative feedback control of immunological reactions, thus impeding inflammation and autoimmunity. Tumour cells may express PD-L1, which binds to PD-1 allowing cancer cells to evade the attack of T-cells. Blockade of the PD-1/PD-L1 pathway has now shown useful in therapy of multiple cancer types, causing durable tumour regressions in a substantial proportion of otherwise treatment refractory cases of melanoma, and carcinomas of e.g., lung, kidney, and urinary tract. Patients without tumour PD-L1 expression can also derive benefit from blocking agents (studies across multiple cancer types demonstrate a pooled response rate of 48% in patients with PD-L1-positive tumours compared to 15% in PD-L1-negative tumours). Tonsil and placenta can be used as positive and negative tissue controls. However, tonsil is found to be superior to placenta, as tonsil displayes a range of PD-L1 expression levels. Tonsil displayes the following reaction pattern: No staining reaction in the vast majority of lymphocytes including mantle zone and germinal centre B-cells, no staining reaction in superficial epithelial cells, a weak to moderate, typically punctuated membranous staining reaction of the majority of germinal centre macrophages and finally a moderate to strong staining reaction of the majority of epithelial crypt cells.

Immunogen:	Synthetic peptide within human PD-L1 aa 260-290 (Cytoplasmic).
Positive control:	MDA-MB-231 cell lysate, U-87 MG cell lysate, RAW264.7 cell lysate, RAW264.7 treated with 10μg/mL LPS for 8 hours cell lysate, J774A.1 cell lysate, J774A.1 treated with 1μg/mL LPS for 24 hours cell lysate, Mouse spleen tissue lysate, Mouse lung tissue lysate.
Subcellular location:	Cell membrane, Early endosome membrane, Recycling endosome membrane.
Database links:	SwissProt: Q9NZQ7 Human | Q9EP73 Mouse
Recommended Dilutions:	
WB	1:2,000
Storage Buffer:	PBS (pH7.4), 0.1% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.
Storage Instruction:	Store at +4℃ after thawing. Aliquot store at -20℃. Avoid repeated freeze / thaw cycles.
Purity:	Protein A affinity purified.

Images

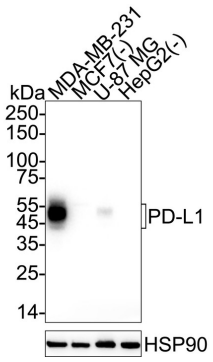

Fig1: Western blot analysis of PD-L1 on different lysates with Rabbit anti-PD-L1 antibody (HA723510) at 1/2,000 dilution.

Lane 1: MDA-MB-231 cell lysate
Lane 2: MCF7 cell lysate (negative)
Lane 3: U-87 MG cell lysate
Lane 4: HepG2 cell lysate (negative)

Lysates/proteins at 20 µg/Lane.

Predicted band size: 33 kDa
Observed band size: 45-55 kDa

Exposure time: 20 seconds; ECL: K1801;
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 (HA723510) at 1/2,000 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.

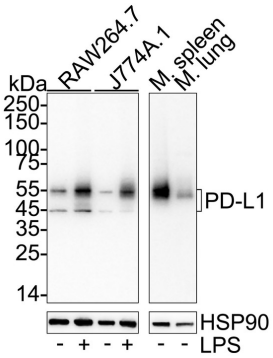

Fig2: Western blot analysis of PD-L1 on different lysates with Rabbit anti-PD-L1 antibody (HA723510) at 1/2,000 dilution.

Lane 1: RAW264.7 cell lysate
Lane 2: RAW264.7 treated with 10µg/mL LPS for 8 hours cell lysate
Lane 3: J774A.1 cell lysate
Lane 4: J774A.1 treated with 1µg/mL LPS for 24 hours cell lysate
Lane 5: Mouse spleen tissue lysate
Lane 6: Mouse lung tissue lysate

Lysates/proteins at 20 µg/Lane.

Predicted band size: 33 kDa
Observed band size: 45-55 kDa

Exposure time: 59 seconds; ECL: K1802;
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 (HA723510) at 1/2,000 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.

Background References

1. Lei Q et al. Resistance Mechanisms of Anti-PD1/PDL1 Therapy in Solid Tumors. Front Cell Dev Biol. 2020 Jul
2. Tamene W et al. PDL1 expression on monocytes is associated with plasma cytokines in Tuberculosis and HIV. PLoS One. 2021 Oct