Data Sheet (Cat.No.TMAH-00871)

TargetMol

Anti-PD-L1 Antibody (5A18)

Product Details

Ig Type:	IgG2b
Reactivity:	Human
Conjugation:	Unconjugated
Clone:	5A18
Purification:	Protein G purified

Applications

Verified Activity:

1. Western Blot
-Positive WB detected in: A549 whole cell lysate, PC-3 whole cell lysate, HepG2 whole cell lysate, MCF-7 whole cell lysate, 293 whole cell lysate, Hela whole cell lysate
-All lanes: PD-L1 antibody at 1:1000
-Secondary: Goat polyclonal to Mouse IgG at 1/10000 dilution
-Predicted band size: 34, 21 kDa
-Observed band size: 55, 70 kDa
2. IHC image of TMAH-00871 diluted at 1:100 and staining in paraffin-embedded human tonsil tissue performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a biotinylated secondary antibody and visualized using an HRP conjugated SP system.
3. IHC image of TMAH-00871 diluted at 1:100 and staining in paraffin-embedded human colon cancer performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a biotinylated secondary antibody and visualized using an HRP conjugated SP system.
4. Immunofluorescence staining of 293 cells with TMAH-00871 at 1:150, counter-stained with DAPI. The cells were blocked in 10% normal Goat Serum and then incubated with the primary antibody overnight at 4°C. The secondary antibody was Alexa Fluor 488-congugated AffiniPure Goat Anti-Mouse IgG(H+L).
5. Immunofluorescence staining of A549 cells with TMAH-00871 at 1:150, counter-stained with DAPI. The cells were blocked in 10% normal Goat Serum and then incubated with the primary antibody overnight at 4°C. The secondary antibody was Alexa Fluor 488-congugated AffiniPure Goat Anti-Mouse IgG(H+L).
6. Immunofluorescence staining of Hela cells with TMAH-00871 at 1:150, counter-stained with DAPI. The cells were blocked in 10% normal Goat Serum and then incubated with the primary antibody overnight at 4°C. The secondary antibody was Alexa Fluor 488-congugated AffiniPure Goat Anti-Mouse IgG(H+L).
7. Overlay histogram showing 293 cells stained with TMAH-00871 (red line) at 1:300. The cells were incubated in 1x PBS /10% normal goat serum to block non-specific protein-protein interactions followed by primary antibody for 1 h at 4°C. The secondary antibody used was FITC goat anti-mouse IgG(H+L) at 1/200 dilution for 1 h at 4°C. Isotype control antibody (green line) was used under the same conditions. Acquisition of >10,000 events was performed.

8. Overlay histogram showing A549 cells stained with TMAH-00871 (red line) at 1:300. The cells were incubated in 1x PBS /10% normal goat serum to block non-specific protein-protein interactions followed by primary antibody for 1 h at 4°C. The secondary antibody used was FITC goat anti-mouse IgG(H+L) at 1/200 dilution for 1 h at 4°C. Isotype control antibody (green line) was used under the same conditions. Acquisition of >10,000 events was performed.
9. Overlay histogram showing Hela cells stained with TMAH-00871 (red line) at 1:300. The cells were incubated in 1x PBS /10% normal goat serum to block non-specific protein-protein interactions followed by primary antibody for 1 h at 4°C. The secondary antibody used was FITC goat anti-mouse IgG(H+L) at 1/200 dilution for 1 h at 4°C. Isotype control antibody (green line) was used under the same conditions. Acquisition of >10,000 events was performed.

Application: ELISA, WB, IHC, IF, FCM

Properties

Purity: >95%

Stability & Storage: Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles.

Shipping: Shipping with blue ice.

Antigen Details

Immunogen: Recombinant Protein: Human Programmed cell death 1 ligand 1 Protein (19-238AA)

Antigen Species: Human

Gene ID: 29126

Uniprot ID: Q9NZQ7

Synonyms: B7H1;CD274;PDCD1LG1;PDCD1L1;B7-H;PDL1;PD-L1;PD-L1B7 homolog 1;B7-H1

Biology Area: Immunology

Research Background

Plays a critical role in induction and maintenance of immune tolerance to self. As a ligand for the inhibitory receptor PDCD1/PD-1, modulates the activation threshold of T-cells and limits T-cell effector response. Through a yet unknown activating receptor, may costimulate T-cell subsets that predominantly produce interleukin-10 (IL10). 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. The interaction with PDCD1/PD-1 inhibits cytotoxic T lymphocytes (CTLs) effector function. 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.