

Anti-H_CD274(PDL1) hIgG1 Antibody (Atezolizumab)

Product information

GM-31740AB-10	10 µg
GM-31740AB-100	100 µg
GM-31740AB-1000	1 mg

Antibody Information

Species Reactivity	Human; Mouse
Clone	Atezolizumab
Source/Isotype	Monoclonal Human IgG1 /k
Application	Flow Cytometry; Block assay
Specificity	Detects PDL1
Gene	PDL1
Other Names	B7-H, B7H1, PD-L1, PDCD1L1, PDCD1LG1, CD274, hPD-L1
Gene ID	29126(human), 60533(mouse)
Background	Programmed death-ligand 1 (PD-L1) also known as cluster of differentiation 274 (CD274) or B7 homolog 1 (B7-H1) is a protein that in humans is encoded by the CD274 gene. Programmed death-ligand 1 (PD-L1) is a 40kDa type 1 transmembrane protein that has been speculated to play a major role in suppressing the adaptive arm of immune systems during particular events such as pregnancy, tissue allografts, autoimmune disease and other disease states such as hepatitis. Normally the adaptive immune system reacts to antigens that are associated with immune system activation by exogenous or endogenous danger signals. In turn, clonal expansion of antigen-specific CD8+ T cells and/or CD4+ helper cells is propagated. The binding of PD-L1 to the inhibitory checkpoint molecule PD-1 transmits an inhibitory signal based on interaction with phosphatases (SHP-1 or SHP-2) via Immunoreceptor Tyrosine-Based Switch Motif (ITSM). This reduces the proliferation of antigen-specific T-cells in lymph nodes, while simultaneously reducing apoptosis in regulatory T cells (anti-inflammatory, suppressive T cells) - further mediated by a lower regulation of the gene Bcl-2.
Storage	Store at 2-8°C short term (1-2 weeks). Store at ≤ -20°C long term. Avoid repeated freeze-thaw.
Formulation	Phosphate-buffered solution, pH 7.2.
Endotoxin	< 1 EU/mg, determined by LAL gel clotting assay

Version:3.1 Revision Date:12/29/2023

Data Examples

Flow cytometry

The recommended usage range is 0.5-4 µg per test. H_CD274(PD-L1) CHO-K1 Cell Line (Catalog # GM-C01115) was stained with Anti-H_CD274(PDL1) hIgG1 Antibody(Atezolizumab)(Catalog # GM-31740AB) or isotype control antibody, followed by anti-Human IgG APC-conjugated Secondary Antibody.

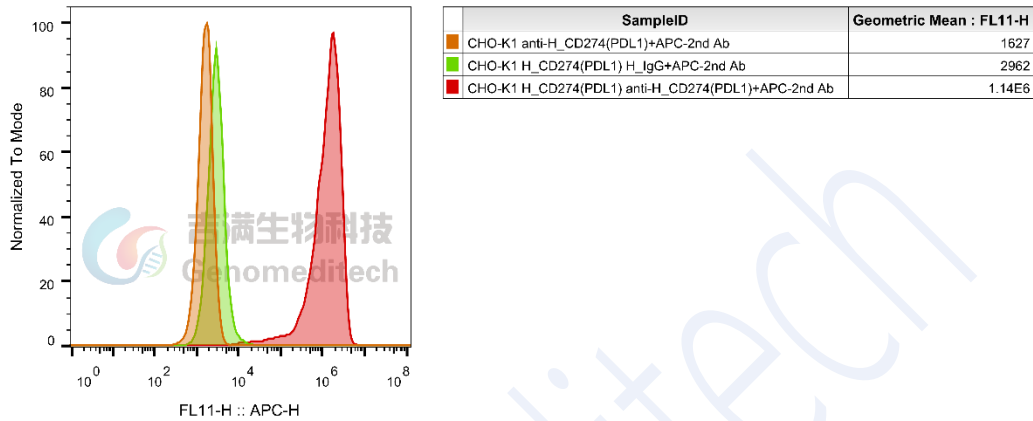


Fig 1. FACS

Flow cytometry

The recommended usage range is 0.5-4 µg per test. Mouse PDL1 aAPC CHO-K1 Cell Line (Catalog # GM-C25791) was stained with Anti-H_CD274(PDL1) hIgG1 Antibody(Atezolizumab)(Catalog # GM-31740AB) or isotype control antibody, followed by anti-Human IgG APC-conjugated Secondary Antibody.

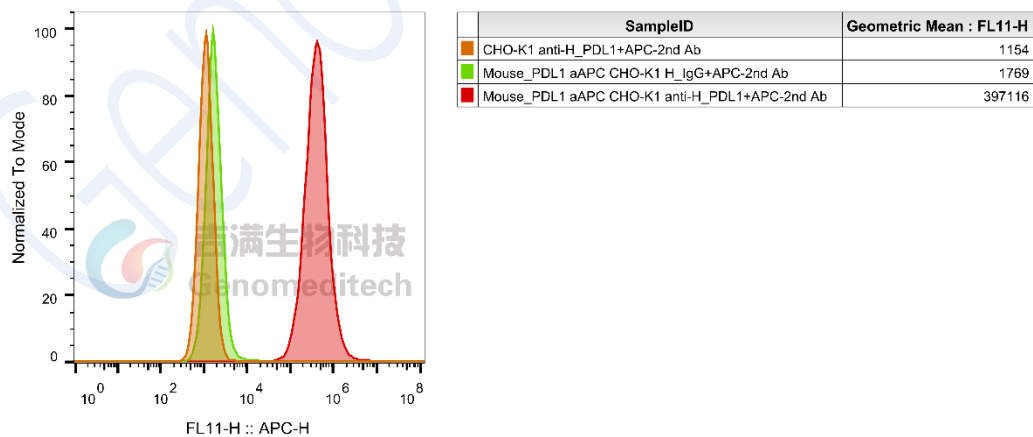
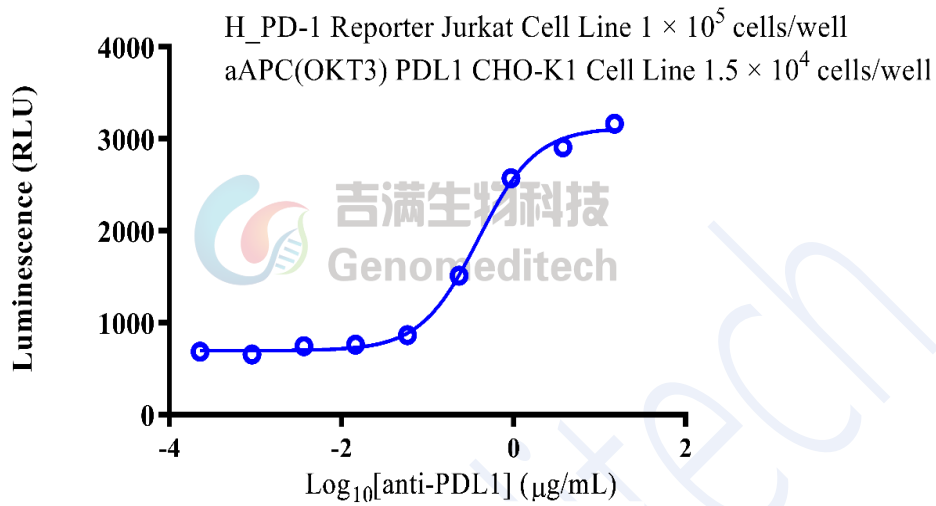


Fig 2. FACS

Block assay

Anti-H_CD274(PDL1) hlgG1 Antibody(Atezolizumab)(Catalog # GM-31740AB) stimulated Luminescence of H_PD-1 Reporter Jurkat Cell Line (Catalog # GM-C07928) binded with aAPC(OKT3) PDL1 CHO-K1 Cell Line (Catalog # GM-C05269). EC50 for this effect is 0.3911 $\mu\text{g/mL}$.



H_PD-1 PDL1 Reporter Blockade Assay	
EC50	0.3911

Fig 3. Assay