

Anti-PD1 hIgG4 Antibody(Pembrolizumab)

Product information

GM-52674AB-10	10 µg
GM-52674AB-100	100 µg
GM-52674AB-1000	1 mg

Antibody Information

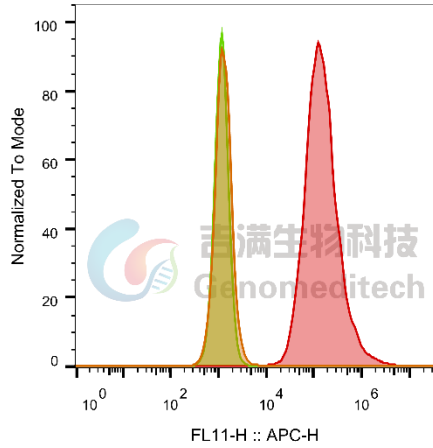
Species Reactivity	Human; Cynomolgus
Clone	Pembrolizumab
Source/Isotype	Monoclonal Human IgG4 /k
Application	Flow Cytometry; Activation assay
Specificity	Detects PD1
Gene	PD1
Other Names	CD279, PD-1, PDCD1, SLEB2, hPD-1, hPD-I, hSLE1
Gene ID	5133 (Human)
Background	<p>The programmed cell death 1 protein (PD-1, PDCD1, CD279) is a member of the CD28 family of immunoreceptors that regulate T cell activation and immune responses. The PD-1 protein contains an extracellular Ig V domain, a transmembrane domain, and a cytoplasmic tail that includes an immunoreceptor tyrosine-based inhibitory motif (ITIM) and an immunoreceptor tyrosine-based switch motif (ITSM). PD-1 is activated by the cell surface ligands PD-L1 and PD-L2. Upon activation, PD-1 ITIM and ITSM phosphorylation leads to the recruitment of the protein tyrosine phosphatases SHP-1 and SHP-2, which suppress TCR signaling. In addition to activated T-cells, PD-1 is expressed in activated B-cells and monocytes, although its function in these cell types has not been fully characterized. The PD-1 pathway plays an important role in immune tolerance; however, research studies show that cancer cells often adopt this pathway to escape immune surveillance. Consequently, blockade of PD-1 and its ligands is proving to be a sound strategy for neoplastic intervention.</p>
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:12/25/2023

Data Examples

Flow cytometry

The recommended usage range is 0.5-4 µg per test. H_PD-1 Reporter CHO-K1 Cell Line was stained with Anti-PD1 hlgG4 Antibody(Pembrolizumab) (Catalog # GM-52674AB) or isotype control antibody, followed by anti-Human IgG APC-conjugated Secondary Antibody.

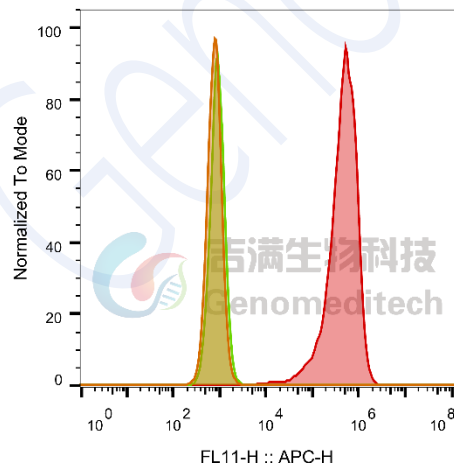


SampleID	Geometric Mean : FL11-H
CHO-K1 anti-PD1+APC-2nd Ab	1296
H_PD-1 Reporter CHO-K1 H_IgG+APC-2nd Ab	1172
H_PD-1 Reporter CHO-K1 anti-PD1+APC-2nd Ab	147946

Fig 1. FACS

Flow cytometry

The recommended usage range is 0.5-4 µg per test. Cynomolgus_PD1 CHO-K1 Cell Line (Catalog # GM-C19512) was stained with Anti-PD1 hlgG4 Antibody(Pembrolizumab) (Catalog # GM-52674AB) or isotype control antibody, followed by anti-Human IgG APC-conjugated Secondary Antibody.



SampleID	Geometric Mean : FL11-H
CHO-K1 anti-PD1+APC-2nd Ab	791
CHO-K1 Cyno_PD1 H_IgG+APC-2nd Ab	914
CHO-K1 Cyno_PD1 anti-PD1+APC-2nd Ab	4.18E5

Fig 2. FACS

Activation assay

Anti-PD1 hIgG4 Antibody(Pembrolizumab) (Catalog # GM-52674AB) 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 0.8411 $\mu\text{g/mL}$.

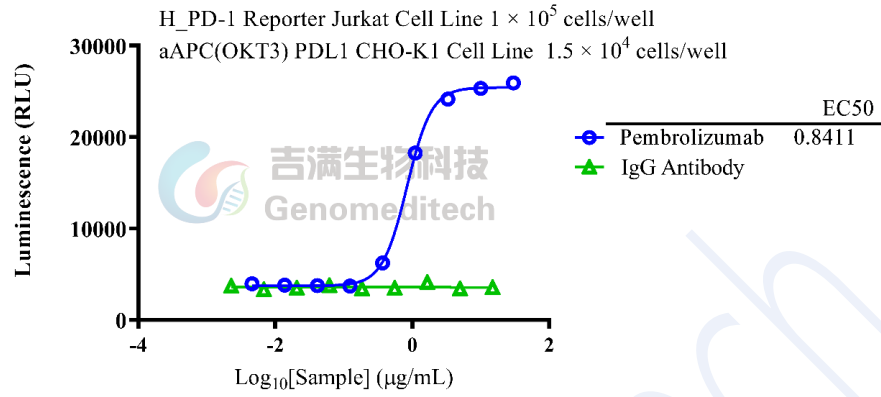


Fig 3. Assay