

Anti-BTLA hlgG4 Antibody(22B3)

Product information

GM-50103AB-10	10 µg
GM-50103AB-100	100 µg
GM-50103AB-1000	1 mg

Antibody Information

Species Reactivity	Human
Clone	22B3
Source/Isotype	Monoclonal human IgG4, κ
Application	Flow Cytometry; Block assay
Specificity	Detects BTLA
Gene	BTLA
Other Names	BTLA1, CD272
Gene ID	151888
Background	<p>B- and T-lymphocyte attenuator or BTLA (also known as cluster of differentiation 272 or CD272) is a protein that belongs to the CD28 immunoglobulin superfamily (IgSF) which is encoded by the BTLA gene located on the 3rd human chromosome. BTLA is a 289 amino acid long transmembrane glycoprotein. It consists of an extracellular domain, a transmembrane domain, and a cytoplasmic domain, similar in structure to PD-1 and CTLA-4. HVEM is the main ligand of BTLA which has inhibition and activation capacities. When a T cell is fully activated HVEM is internalized, and this allows BTLA to interact in a trans manner (with molecules on other cells). This enables other cells who express HVEM to regulate activated T cells. Treg cells express HVEM and can facilitate immune suppression through interaction with BTLA. Furthermore, the blockage of BTLA together with PD-1 can help reverting the state of exhaustion.</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_BTLA CHO-K1 Cell Line (Catalog # GM-C19148) was stained with Anti-BTLA hlgG4 Antibody (Catalog # GM-50103AB) or isotype control antibody, followed by anti-Human IgG APC-conjugated Secondary Antibody.

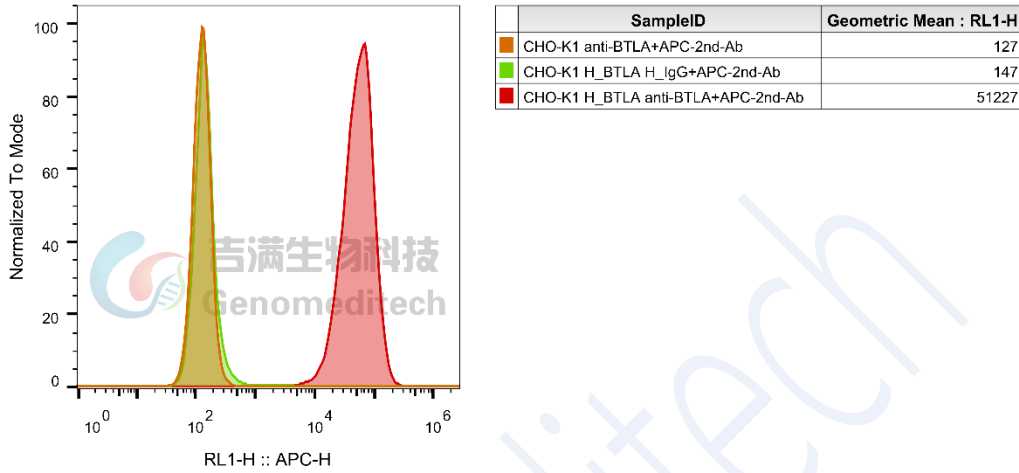


Fig 1. FACS

Block assay

Anti-BTLA hlgG4 Antibody (Catalog # GM-50103AB) inhibits H_BTLA CHO-K1 Cell Line (Catalog # GM-C19148) Luminescence induced by H_HVEM Reporter Jurkat Cell Line (Catalog # GM-C25497). IC50 for this effect is 1.099 $\mu\text{g}/\text{mL}$.

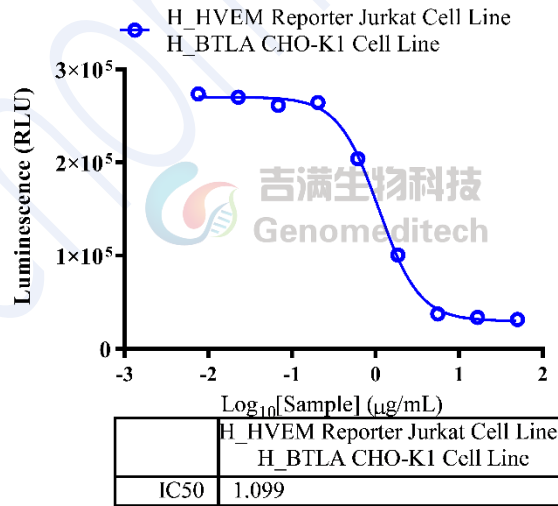


Fig 2. Assay